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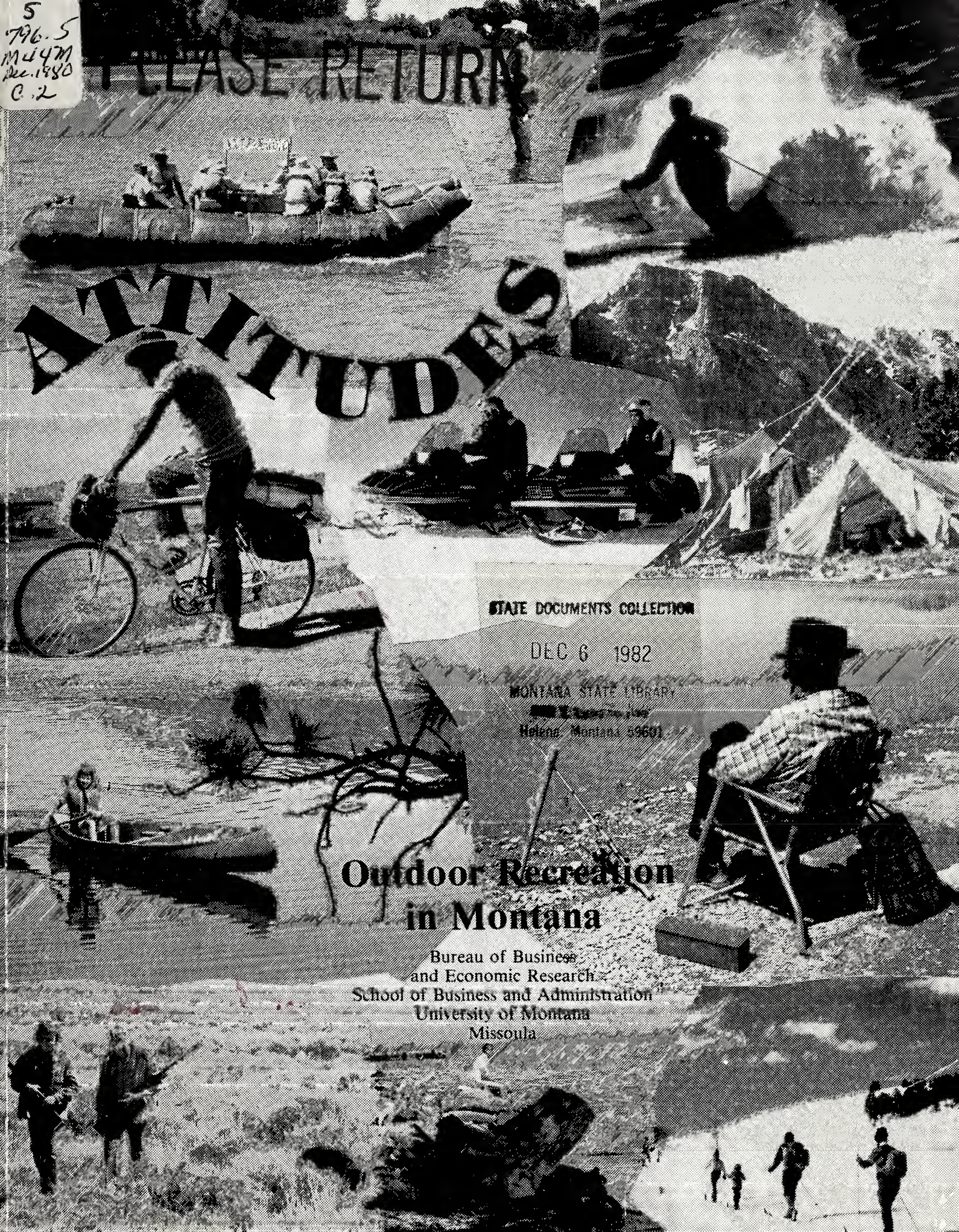

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MONTANA OUTDOOR RECREATION SURVEY

Prepared for
Montana Department of Fish, Wildlife, and Parks
Helena, Montana

by
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INTRODUCTION

This report presents the results of an extensive survey of Montana residents regarding outdoor recreation (in the broadest sense) -- their activity, their preferences, and their opinions regarding numerous issues involved in outdoor recreation in Montana. The project was funded by the Montana Department of Fish, Wildlife, and Parks to obtain the kinds of information that would assist it in its planning for the 1981-1983 biennium; it has generated considerable information of interest not only to the Department but also to others concerned about outdoor recreation in Montana.

The report has been divided into several chapters, covering such topics as the extent of the respondents' involvement in outdoor recreation activity, their preferences in terms of activities and services, and their opinions and preferences regarding several outdoor recreation issues (such as funding, control or regulation of land or water use, revisions of programs or services, and so on), as well as some of the demographic characteristics of the respondents and their households and of those who hold Departmental licenses. Discussions of the methodology and the survey sample are included in the appendixes, along with copies of the survey instruments.

Because of sample size limitations, which are discussed in Appendix A, geographic breakdowns of the survey results, for the most part, have

been restricted to multicounty groupings -- the seven largest counties and the remaining forty-nine counties, each taken as a whole, and seven broad multicounty regions. The seven largest counties are those that had populations over 30,000 in 1980: Butte-Silver Bow (formerly Silver Bow), Cascade, Flathead, Gallatin, Lewis and Clark, Missoula, and Yellowstone counties. These are also the predominantly urban counties in the state and contain the cities of Butte, Great Falls, Kalispell, Bozeman, Helena, Missoula, and Billings within their borders. The remaining forty-nine counties all had populations under 25,000 in 1980. The counties have also been grouped into seven broad regions, detailed in figure B.1 in Appendix B, which are the districts established by the Department for the administration of its programs.

A couple of other points are worth noting for the reader's information. Some of the analyses focus on the "license status" of the respondents and refer to them as "license holders" or "nonholders." "License holders" are those who reported purchasing a license from the Department of Fish, Wildlife, and Parks (DFWP) in 1979; those who did not purchase a DFWP license of any kind are referred to as "nonholders." Also, because the Department is referred to frequently, and for the sake of brevity, references in the text or tables will cite the "Department" or "DFWP" unless otherwise warranted.

The Bureau of Business and Economic Research would like to extend special thanks to the Montana Fish and Game Commission and the Department of Fish, Wildlife, and Parks for its funding and sponsorship of this

project and would also like to thank members of the staff -- Steve Bayless, Administrator, Conservation Education Division; and Ann Miller, Chief, Information Services Bureau -- for their assistance during the conduct of the project.

CHAPTER 1

OUTDOOR RECREATION ACTIVITIES AND PROGRAMS

One of the purposes of the survey was to determine the extent to which Montanans participate in outdoor recreation activities, and the activities that are the most popular. The results show that most Montanans devote some of their leisure time to outdoor recreation activity. Survey respondents were asked to name the two or three things they do most often during their leisure time, including both indoor and outdoor hobby and recreation activities. Ninety-eight percent of the survey participants responded to this question, and 75 percent of those responding cited one or more outdoor recreation activities.

This was followed by a series of questions designed to measure not only the overall rates of participation for selected outdoor recreation activities, but also what factors may affect people's participation. Since the fuel situation in particular might significantly affect the ability of recreation enthusiasts to pursue their activities, a couple of questions were directed specifically at this issue.

Respondents were also asked a series of general questions designed to ascertain whether they wish to see revisions in the outdoor recreation services and programs currently offered.

Participation Rates for Selected Outdoor Recreation Activities

Respondents were read a list of selected outdoor recreation activities and asked how many days they participated in each activity during 1979. Table 1.1 (three pages) shows the percentage of total respondents who indicated that they had participated in the activity at least one day in 1979. Table 1.2 shows the median number of participation days for each activity. For example, almost 59 percent of the respondents reported fishing in Montana at least one day in 1979 (table 1.1). The median number of days recorded was fourteen (table 1.2), which means that about half the respondents who fished in 1979 reported fishing fewer than fourteen days, and about half said they fished on more than fourteen days.

In general, the most popular recreation activities in Montana in 1979 were the most sedentary: picnicking, driving for pleasure, and walking for pleasure (as opposed to hiking or mountain climbing). Over 70 percent of the survey respondents reported doing each of these activities at least once in 1979. Also, as might be expected, the younger respondents showed higher participation rates, especially in the more vigorous activities. Bird watching, driving or walking for pleasure, and picnicking were activities which showed relatively greater participation by those sixty-five years of age and over. The respondent's sex and residence significantly affected participation in only a few activities. However, the license status of respondents was a generally significant factor; license holders were more likely than nonholders to have participated in every activity listed.

Table 1.1

Participation Rates for Selected Outdoor Recreation Activities
1979

(As Percentages of Total Respondents)

	Back-country Touring[a]	Bicycling[b]	Bird Watching[c]	Boating[d]	Camping	Cross-country Skiing	Driving for Pleasure	*Number of Respondents*
All respondents	23.8	32.8	29.4	32.5	57.6	14.6	71.4	*1,237*
Residence, by DFWP region								
Region 1	22.1	34.4	46.7	48.4	52.5	23.8	71.3	*122*
Region 2	22.2	35.4	27.8	29.7	60.4	20.3	65.1	*212*
Region 3	32.8	36.4	28.7	28.7	66.7	21.5	72.8	*195*
Region 4	22.8	30.2	29.5	34.7	53.6	11.9	70.5	*265*
Region 5	20.9	31.8	24.5	27.3	57.3	9.5	77.3	*323*
Region 6	25.0	31.7	27.9	34.6	51.0	3.8	72.1	*104*
Region 7	20.2	29.3	25.3	29.3	44.4	5.1	70.7	*99*
Residence, by county size[e]								
Seven largest counties	24.4	35.7	28.2	35.4	62.1	18.5	72.7	*717*
All other counties	23.1	28.8	31.2	28.5	51.3	9.0	69.6	*520*
License status								
DFWP license holder	31.4	36.0	31.1	38.5	70.7	18.7	74.2	*730*
Nonholder	13.0	28.2	27.0	23.9	38.7	9.5	67.3	*507*
Sex of respondent								
Male	28.4	29.3	28.4	37.6	63.1	15.1	70.6	*564*
Female	20.1	35.8	30.3	28.2	52.9	14.1	72.1	*673*
Age of respondent[f]								
18-24 years	39.6	54.3	21.8	49.2	75.6	19.8	85.8	*197*
25-34 years	29.9	45.6	26.5	37.7	71.5	21.1	79.4	*355*
35-44 years	26.2	30.3	29.9	29.0	63.3	18.1	68.3	*221*
45-64 years	13.4	16.4	32.8	26.8	43.8	7.7	66.6	*299*
65 years and over	8.1	11.9	38.7	16.9	23.7	1.2	50.0	*160*

Note: Because many respondents cited more than one activity, the percentage detail does not add to 100.0

[a] With four-wheel drive vehicle.

[b] Nonmotorized.

[c] Includes nature study, outdoor photography.

[d] Motorized. Includes water skiing.

[e] The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

[f] The number of respondents does not add to the total because those who did not answer the age question were omitted from the tabulation.

Table 1.1 (continued)

Participation Rates for Selected Outdoor Recreation Activities
1979

(As Percentages of Total Respondents)

	Fishing[a]	Hiking	Horseback Riding	Hunting[b]	Motorbike Riding[c]	Outdoor Swimming	Picnicking	Number of Respondents
All respondents	58.8	38.4	18.8	35.2	18.8	65.3	77.5	1,237
Residence, by DFWP region								
Region 1	67.2	47.5	21.3	41.0	21.3	81.1	81.1	172
Region 2	59.4	48.6	19.3	31.1	18.9	66.0	79.2	212
Region 3	62.1	43.6	22.1	40.5	15.4	64.6	79.5	195
Region 4	57.9	36.8	16.1	31.9	20.0	65.3	75.1	285
Region 5	56.8	37.3	13.6	32.7	17.7	63.6	75.5	220
Region 6	56.7	24.0	26.9	38.5	25.0	59.6	77.9	104
Region 7	50.4	17.2	19.2	38.4	15.2	55.6	76.8	99
Residence, by county size[d]								
Seven largest counties	61.8	43.7	16.7	32.5	18.8	68.2	77.5	717
All other counties	54.8	31.2	21.7	39.0	18.8	61.3	77.5	520
License status								
DFWP license holder	84.9	45.6	21.1	54.8	22.5	74.0	81.5	730
Nonholder	21.3	28.0	15.6	7.1	13.6	52.9	71.8	507
Sex of respondent								
Male	72.3	42.2	21.1	55.5	25.0	66.5	75.7	564
Female	47.5	35.2	16.9	18.3	13.7	64.3	79.0	673
Age of respondent[e]								
18-24 years	64.5	57.4	35.5	42.6	38.6	88.8	83.2	197
25-34 years	69.0	52.4	22.8	45.4	23.4	78.6	83.9	355
35-44 years	60.2	38.0	17.2	38.9	15.4	71.0	82.4	221
45-64 years	54.5	24.7	12.7	27.4	12.7	50.5	72.6	299
65 years and over	36.9	10.6	3.7	13.1	1.2	28.7	60.0	160

Note: Because many respondents cited more than one activity, the percentage detail does not add to 100.0

[a] Includes ice fishing.

[b] Includes trapping, archery/bow and arrow hunting.

[c] Both on- and off-road vehicles.

[d] The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

[e] The number of respondents does not add to the total because those who did not answer the age question were omitted from the tabulation.

Table 1.1 (continued)

Participation Rates for Selected Outdoor Recreation Activities
1979

(As Percentages of Total Respondents)

	Playing Outdoor Games[a]	Riverfloating or Canoeing[b]	Snowmobiling	Walking for Pleasure	Downhill Skiing	Other Winter Sports[c]	Rock Hounding[d]	*Number of Respondents*
All respondents	58.5	25.0	14.8	71.9	5.7	1.2	1.5	*1,237*
Residence, by DFWP region								
Region 1	60.7	25.4	15.6	72.1	5.7	0.8	1.6	*122*
Region 2	55.7	30.7	15.6	70.8	4.7	0.5	0.9	*212*
Region 3	60.0	37.9	12.8	74.4	10.3	1.0	2.6	*195*
Region 4	61.4	24.6	15.8	73.3	5.3	2.8	1.4	*285*
Region 5	60.5	16.8	8.6	71.8	6.8	0.9	0.9	*220*
Region 6	53.8	12.5	23.1	69.2	1.9	0.0	1.0	*104*
Region 7	51.5	19.2	18.9	67.7	1.0	1.0	2.0	*99*
Residence, by county size[e]								
Seven largest counties	63.6	29.4	12.0	73.6	7.1	1.1	1.0	*717*
All other counties	51.5	18.8	18.7	69.4	3.7	1.3	2.1	*520*
License status								
DFWP license holder	62.9	33.0	16.3	73.7	6.4	1.5	1.8	*730*
Nonholder	52.3	13.4	12.6	69.2	4.5	0.8	1.0	*507*
Sex of respondent								
Male	61.7	30.3	16.7	67.6	6.0	0.7	1.8	*564*
Female	55.9	20.5	13.2	75.5	5.3	1.6	1.2	*673*
Age of respondent[f]								
18-24 years	84.3	40.1	29.4	77.2	10.7	2.0	0.5	*197*
25-34 years	80.6	35.5	14.9	79.7	9.6	2.5	1.4	*355*
35-44 years	60.2	24.4	14.0	71.9	3.2	0.5	1.4	*221*
45-64 years	35.5	14.4	13.4	65.2	2.3	0.3	2.7	*299*
65 years and over	20.0	3.7	0.6	61.2	0.6	0.0	0.6	*160*

Note: Because many respondents cited more than one activity, the percentage detail does not add to 100.0.
[a] Golf, tennis, frisbee, softball, etc.
[b] Includes rafting.
[c] Sledding, tobogganing, snowshoeing, dogsledding, etc.
[d] Includes prospecting and metal detection.
[e] The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.
[f] The number of respondents does not add to the total because those who did not answer the age question were omitted from the tabulation.

Table 1.2

Extent of Participation in Selected Outdoor Recreation Activities
1979

	---------- Participated in 1979 ----------					
	Percentage of Total Respondents	*Number Participating*	*Median Number of Days*	Did Not Participate	Total	*Number of Respondents*
Back-country touring	23.8	*295*	*8*	76.2	100.0	*1,237*
Bicycling	32.8	*406*	*20*	67.2	100.0	*1,237*
Bird watching	29.4	*364*	*25*	70.6	100.0	*1,237*
Boating	32.5	*402*	*6*	67.5	100.0	*1,237*
Camping	57.6	*712*	*10*	42.4	100.0	*1,237*
Cross-country skiing	14.6	*180*	*6*	85.4	100.0	*1,237*
Driving for pleasure	71.4	*883*	*12*	28.6	100.0	*1,237*
Fishing	58.8	*728*	*14*	41.2	100.0	*1,237*
Hiking	38.4	*475*	*6*	61.6	100.0	*1,237*
Horseback riding	18.8	*233*	*10*	81.2	100.0	*1,237*
Hunting	35.2	*436*	*10*	64.8	100.0	*1,237*
Motorbike riding	18.8	*233*	*14*	81.2	100.0	*1,237*
Outdoor swimming	65.3	*808*	*10*	34.7	100.0	*1,237*
Picnicking	77.5	*959*	*6*	22.5	100.0	*1,237*
Playing outdoor games	58.5	*724*	*15*	41.5	100.0	*1,237*
Riverfloating or canoeing	25.0	*309*	*4*	75.0	100.0	*1,237*
Snowmobiling	14.8	*183*	*5*	85.2	100.0	*1,237*
Walking for pleasure	71.9	*889*	*20*	28.1	100.0	*1,237*
Downhill skiing	5.7	*70*	*10*	94.3	100.0	*1,237*
Other winter sports	1.2	*15*	*7*	98.8	100.0	*1,237*
Rock hounding	1.5	*18*	*10*	98.5	100.0	*1,237*

Following is a discussion of the overall participation rates for each activity. The responses were analyzed by residence, sex, age, and license status of the respondents; and any significant differences in participation among the respondent groups are noted.

Back-Country Touring. Just under 24 percent of the respondents reported back-country touring with a four-wheel drive vehicle in 1979. Significantly greater participation was reported by license holders (31 percent) compared with nonholders (13 percent). Those in the younger age groups were more likely to have participated in this activity, with participation falling off significantly for those over forty-five years of age and older. Eight days was the median number of days reported by those who had done some back-country touring in 1979.

Bicycling. Over 32 percent of the respondents reported bicycling at least one day in 1979. Age was the only factor significantly affecting participation; over 54 percent of those between eighteen and twenty-four years of age reported bicycling. Respondents between twenty-five and thirty-four years of age also reported a relatively higher rate of participation (over 45 percent), but participation in the other older groups diminished sharply with age. Respondents reported a median of twenty days of bicycling in 1979.

Bird Watching. This activity broadly included nature study and outdoor photography. Almost 30 percent of the survey respondents indicated some participation in these activities in 1979, and, as noted

earlier, a substantial portion of respondents in the older age categories indicated participation. Age was found to be of no statistical significance in determining participation. An interesting difference was found when comparing participants' places of residence. Those residing in region 1 (northwestern Montana, including the regions west of Glacier Park and surrounding Flathead Lake) recorded the highest participation rate -- over 46 percent. Those from region 5 (south central) showed the lowest rate, 24 percent. Participants in this activity reported the highest median number of participation days, twenty-five, of all the activities listed.

Boating. Thirty-two percent of the respondents reported some motorized boating or water skiing in 1979, and several characteristics apparently were significant. License holders were more likely to have gone boating than nonholders (38 percent versus about 24 percent), and men reported higher participation than women. As might be expected, those in the two younger age groups (under thirty-five years of age) were also more likely to have participated in this activity. And, again, respondents in region 1 (northwest) reported higher participation than did those in the other regions, possibly because that region, which includes Flathead Lake, offers abundant boating opportunities. Respondents from region 5 (south central) reported the least participation. Boating enthusiasts showed a median of six days' participation in 1979.

Camping. Camping was enjoyed by a majority -- over 57 percent -- of the survey respondents in 1979, with a median of ten days' participation reported. Camping was considered to be all types of camping, not just

backpacking. License holders were significantly more active; over 70 percent of the license holders surveyed said they camped at least once in 1979, while only about 39 percent of the nonholders reported camping. There were also significant differences between the participation rates of men and women; 63 percent of the male respondents indicated participation, compared to about 53 percent of the female respondents. Those in the two younger age groups were far more likely to have camped than those over thirty-five years of age. Apparently residence was also significant. Those who lived in the seven largest counties reported a higher rate of participation (62 percent) than did those in the remaining counties (51 percent). Over two-thirds of those in region 3 (southwest) said they had camped, while the other regions showed less participation, with those in region 7 (southeast) showing a significantly lower participation rate (44 percent).

Cross-Country Skiing. Over 14 percent of those surveyed said they had cross-country skied in 1979. The only significant differences in participation were based on age; those in the age groups spanning eighteen to forty-four years showed similar participation rates, with decreasing participation reported by those over forty-five years of age. Cross-country skiing enthusiasts recorded a median of six days' participation in 1979.

Driving for Pleasure. Driving for pleasure or sightseeing was enjoyed by a large proportion -- 71 percent -- of the survey respondents, and twelve days was the median number recorded. High participation rates

were reported by those from all regions and areas of the state. The only significant rate differences were among the different age groups. Those between eighteen and twenty-four years of age reported the highest participation rate (nearly 86 percent), closely followed by those between twenty-five and thirty-four years of age (79 percent). While no age group reported a participation rate below 50 percent, the rates did decline with age.

Fishing. As noted earlier, nearly 59 percent of the respondents said they had fished in Montana at least one day in 1979; the median number of days reported was fourteen. The respondents residing in the different regions and multicounty areas showed relatively similar participation rates. However, significantly different participation rates were reported by men and women; 72 percent of the male respondents indicated they had fished, while the rate for female respondents was about 47 percent. In terms of age, those under forty-five years of age recorded higher rates of participation than did older respondents. And, interestingly, 21 percent of those who were not license holders said they had fished.

Hiking. Hiking or mountain climbing are also popular activities, enjoyed by over 38 percent of the survey respondents in 1979, who reported a median of six days. Significant differences appeared among respondents in terms of residence, license status, and age. Respondents from the seven most populous counties reported a higher participation rate than did those from the remaining counties (over 43 percent versus 31 percent). Respondents residing in region 2 had the highest rate (almost 49 percent)

of the seven regions, while region 7 (southeast) had the lowest rate (17 percent). License holders were more likely to have gone hiking or mountain climbing than nonholders (over 45 percent and 28 percent, respectively). And, not surprisingly, those in the two younger age groups had the highest participation rates.

Horseback Riding. Almost 19 percent of the survey respondents indicated they went horseback riding in 1979. Place of residence, license status, and sex were not significant factors influencing participation. The only statistically significant difference was based on age; those under thirty-five years of age reported significantly greater participation (27 percent) than did the older respondents (12 percent). Enthusiasts reported a median of ten days of horseback riding in 1979.

Hunting. Over 35 percent of the survey respondents said they had hunted in Montana in 1979; these hunters recorded a median of ten days. Place of residence was not significant; respondents who lived in the seven regions reported participation rates ranging from 31 percent to 41 percent, and those in the largest counties and the rest of the state reported about 32 and 39 percent, respectively. However, the difference in participation rates among men and women was significant; over 55 percent of the male respondents said they had hunted, while only 18 percent of the female respondents indicated they had done so. Those in the three younger age groups (under forty-five years of age) showed relatively, but not significantly, greater participation than did those in the older age groups. In contrast with fishing enthusiasts, far fewer nonholders of licenses

reported doing any hunting. As mentioned earlier, over 21 percent of nonholders said they had fished, but only 7 percent of nonholders reported hunting.

Motorbike Riding. About 19 percent of the respondents said they had gone motorbike riding with on- or off-road vehicles in 1979. Significantly more male than female respondents (25 percent versus about 14 percent) reported participation. Age was the only other notable factor; almost 39 percent of those under twenty-five years of age said they had gone motorbike riding at least once in 1979, and the participation rates decreased sharply in the other age groups. The median number of participation days recorded was fourteen.

Outdoor Swimming. Respondents were asked if they had gone swimming outdoors during 1979. Nearly two-thirds of the respondents indicated they had, and they recorded a median of ten days. Place of residence, license status, and age were significant among respondents. Those who lived in region 1 (which includes Flathead Lake as well as many other lakes and rivers) were far more likely to have gone swimming outdoors; 81 percent of those respondents indicated participation. Respondents from the western and central regions (2, 3, 4, and 5) recorded participation rates between 63 and 66 percent, while those in the more arid eastern part of the state (regions 6 and 7), reported the least participation (55 and 59 percent). Significantly more license holders than nonholders said they had gone swimming (74 percent versus almost 53 percent). And, age was again a statistically significant factor. Those ranging in age from eighteen to

thirty-four years showed high rates of participation (about 89 percent and 78 percent, respectively), followed by those between thirty-five and forty-four years of age (71 percent) and significantly less in the older groups.

Picnicking. Picnicking, like driving for pleasure, is a less vigorous activity and is enjoyed by a large percentage of Montanans. Over 77 percent of the survey respondents indicated they had picnicked at least once in 1979, with a median of six days. Age was a factor affecting participation, but the participation rates for the older age categories were still high. Respondents in the three younger categories (under forty-five years of age) reported very close participation rates, all over 80 percent. Compared to the younger groups, fewer respondents aged forty-five years and older reported picnicking, but their rates were still relatively high -- about 73 and 60 percent, respectively. License holders showed a slight edge over nonholders in participation rates (about 82 percent and 72 percent, respectively).

Playing Outdoor Games. Outdoor games and sports, such as golf, tennis, softball, volleyball, etc., are popular recreation activities. Over 58 percent of the survey respondents said they participated in outdoor games and sports in 1979. Those respondents who reside in the seven-county area reported higher participation than did those in the other counties, and license holders were more likely than nonholders to have participated in such activities. As might be expected, participation rates were very high -- over 80 percent -- among the younger respondents

(under thirty-five years of age). Fifteen days' participation was the median.

River Floating or Canoeing. One-fourth of the respondents said they had gone river floating, canoeing, or rafting in 1979, for a median of four days. Those respondents who lived in region 3 (southwest) were most likely to have gone floating or canoeing (about 38 percent), while those in region 6 (northeast) reported the lowest participation (12 percent). Respondents in the seven most populous counties reported greater participation than did those in the other counties, and license holders were more likely to have gone canoeing or floating than were nonholders. Those in the younger age groups again showed significantly higher rates of participation.

Snowmobiling. Almost 15 percent of the survey respondents said they had gone snowmobiling in 1979. The only apparently significant factor was age. The youngest group (under twenty-five years of age) was highest with a 29 percent participation rate, and the participation declined significantly with age. Enthusiasts reported a median of five days' snowmobiling in 1979.

Walking for Pleasure. Like the other more sedentary activities, walking for pleasure or sightseeing was very popular; it was enjoyed by almost 72 percent of all respondents. Respondents in all geographic regions showed similarly high rates of participation. More women than men reported walking for pleasure or sightseeing, over 75 percent versus

about 67 percent. As might be expected, those under forty-five years of age had the highest participation rates (about 72 percent or more), but respondents in the older age categories also reported substantial participation (over 60 percent). A high median number of days -- twenty -- was recorded for this activity.

Downhill Skiing. A relatively small percentage of survey respondents -- under 6 percent -- said they had gone downhill skiing at least once in 1979. One reason for the smaller response is that downhill skiing, unlike the other activities, was not included in the list of activities read to respondents; survey participants had to mention downhill skiing specifically for their participation to be noted. The very small sample size also makes it difficult to assess the differences in participation rates among the respondent groups. Skiing enthusiasts did show active participation in this activity; ten days was the median number of days spent skiing.

Other Activities. A small percentage of respondents reported participation in other winter sports, rock hounding or metal detection, and miscellaneous activities. The low number of responses makes it impossible to determine statistically significant differences among the respondent groups, and the overall participation rates for these activities must be interpreted with caution.

Preferences for Additional Activity Participation

As a followup, respondents were asked if there were any outdoor recreation activities they wished they could do in Montana but don't

for any reason. Thirty-five percent said "yes" (table 1.3). Relatively similar response rates to this question were recorded by those in all the various respondent groups, although the respondents in region 3 (southwest) were slightly less likely to answer affirmatively.

Those respondents who answered "yes" to that initial question were then asked to cite the reasons or factors that kept them from enjoying the recreation activities in which they would like to participate. Many respondents cited more than one reason, and the reason mentioned most often was that the activity was not available in the respondents' area, either due to geographic limitations, lack of access, or the lack of developed areas. Thirty-eight percent of those answering this question gave this response (table 1.3). Respondents in regions 5, 6, and 7 gave this response with more frequency than the respondents as a whole.

The next most frequently cited reason was that the respondents lacked the time necessary to pursue the recreation activities they wished they could do. The only significant difference in terms of this particular response was between those in region 3 (southwest), who mentioned this least often, and those in region 6 (northeast) who mentioned it the most (about 22 percent and 44 percent, respectively).

Other reasons cited for lack of participation were that an activity was just too expensive to pursue, or that the respondents' age and health were limiting factors. Miscellaneous responses, mentioned by only a few respondents, included lack of equipment necessary for the desired activity and references to the high cost or unavailability of gasoline.

Table 1.3

Responses Concerning Limits on Outdoor Recreation Activity of Respondents
by Residence and License Status

(In Percentages)

	Recreation Participation Limited[a]			------- Reasons for Limits on Participation[b] -------					
	No	Yes	*Number of Respondents*	Lack of Time	Too Expensive	Not Available	Health and Age	Other	*Number of Respondents*
All respondents	64.7	35.3	*1,230*	28.8	12.1	38.0	16.5	32.0	*431*
Residence, by DFWP region									
Region 1	63.0	37.0	*119*	26.7	6.7	33.3	15.6	40.0	*45*
Region 2	66.4	33.6	*211*	25.4	5.6	35.2	25.4	39.4	*71*
Region 3	71.3	28.7	*195*	21.8	18.2	34.4	23.6	40.0	*55*
Region 4	62.9	37.1	*283*	25.0	19.0	36.0	15.0	34.0	*100*
Region 5	60.3	39.7	*219*	34.5	13.8	40.2	10.3	24.1	*87*
Region 6	62.5	37.5	*104*	43.6	7.7	46.2	7.7	17.9	*39*
Region 7	67.7	32.3	*99*	29.4	2.9	47.0	17.6	23.5	*34*
Residence, by county size[c]									
Seven largest counties	64.6	35.3	*713*	25.2	15.9	33.7	17.1	37.0	*246*
All other counties	64.8	35.2	*517*	33.5	7.0	43.8	15.7	25.4	*185*
License status									
DFWP license holder	65.8	34.2	*726*	26.1	14.7	42.4	10.6	31.4	*245*
Nonholder	63.1	36.9	*504*	32.3	8.6	32.2	24.2	32.8	*186*

[a]Percentage detail does not add to 100.0 due to rounding. Seven persons (or 0.6 percent of the total sample) did not respond.
[b]Asked only of those who reported that there were recreation activities they wished to participate in but couldn't (approximately 35 percent of the total sample). Percentage detail does not add to 100.0 because most respondents named more than one reason.
[c]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

The Fuel Situation

To assess the potential effects of the fuel situation on Montanans' outdoor recreation participation, respondents were asked specifically whether or not rising fuel costs or the possibility of fuel not being readily available would affect their outdoor recreation activity. Not surprisingly, a clear majority of respondents -- nearly 63 percent -- said that the fuel situation would affect their outdoor recreation activity in some way (table 1.4).

Among the seven regions, those in region 4 (north central) were the most likely to report that the fuel situation would affect their outdoor recreation activity, while those in region 7 (southeast) were the least likely to say so (about 69 percent compared to 54 percent). These differences, however, were not statistically significant. Those in the two multicounty groups gave relatively similar responses, the majority in each saying the fuel situation would affect them.

License holders were significantly more likely than nonholders to expect that the fuel situation would affect their recreation activities (68 percent versus 55 percent). Since the earlier section in this chapter shows that license holders have higher activity participation rates, this result is not too surprising.

As a followup, those respondents who indicated that the fuel situation would affect their recreation activities were asked to explain specifically how their activities might be affected or changed. Over 64 percent of those answering said that the fuel situation would probably cause them to stay closer to home for their outdoor recreation. Many respondents cited more than one possible reaction, and nearly 39 percent indicated that they

Table 1.4

Effect of Fuel Costs and Availability on Recreation Activity
by Residence and License Status

(In Percentages)

	Effect of Fuel Situation on Recreation[a]			Actions Expected from Those Reporting Some Effect[b]						
	Would Affect	Would Not Affect	*Number of Respondents*	Stay Closer to Home	Participate in Fewer Activities	Participate in Activities Using Less Fuel	Cease Participation	Participate Less Frequently	Other	*Number of Respondents*[b]
All respondents	62.9	36.9	*1,234*	64.1	38.9	21.3	4.5	4.5	11.7	*778*
Residence, by DFWP region										
Region 1	57.4	42.6	*122*	58.6	48.6	28.6	1.4	1.4	9.0	*70*
Region 2	61.8	37.7	*212*	61.4	37.1	15.9	6.8	8.3	12.1	*132*
Region 3	66.0	34.0	*134*	58.9	36.4	20.2	7.0	2.3	14.0	*129*
Region 4	69.5	29.8	*285*	63.5	44.2	21.3	3.0	4.6	11.7	*197*
Region 5	61.5	38.5	*218*	74.1	31.1	25.9	5.2	3.0	8.9	*135*
Region 6	58.7	41.3	*104*	68.9	42.6	16.4	0.0	6.6	6.6	*61*
Region 7	54.5	45.5	*99*	63.0	33.3	22.2	5.6	5.6	13.0	*54*
Residence, by county size[c]										
Seven largest counties	64.8	34.9	*714*	67.7	37.8	20.4	3.7	3.9	13.1	*465*
All other counties	60.2	39.6	*520*	58.8	40.6	22.7	5.8	5.4	9.6	*313*
License status										
DFWP license holder	68.4	31.5	*728*	64.5	39.9	21.6	4.6	5.0	13.4	*499*
Nonholder	54.9	44.7	*506*	63.4	37.3	20.8	4.3	3.6	8.6	*279*

[a]Percentage detail does not add to 100.0 because miscellaneous reponses have been omitted from the table. Three persons (or 0.2 percent of the total sample) did not respond.
[b]Asked only of those who reported that the fuel situation would affect their participation in recreation activities (approximately 63 percent of the total sample). Percentage detail does not add to 100.0 because most respondents cited more than one action.
[c]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

would likely participate in fewer outdoor recreation activities in general. About 21 percent said they would likely participate more in activities that are less dependent on fuel. Other possible effects, mentioned by a small proportion of the respondents, included ceasing recreation activity participation altogether or participating less frequently.

General Program Funding and Revision

Respondents were asked how they think outdoor recreation services and programs in general should be paid for -- by charging fees to those who actually use the services or programs, by using general tax funds paid by all Montana taxpayers, or by some other method.

About 46 percent of the respondents felt that recreation services and programs should be funded by user fees, while 28 percent preferred that funding come from the state's general fund (table 1.5). Approximately 16 percent felt the funding should come from both sources, user fees and the state's general funds. The remaining respondents gave miscellaneous responses.

Among those who did not buy licenses in 1979 (nonholders), 51 percent felt those who utilize the outdoor recreation services and programs should pay for the services by way of user fees. License holders were less enthusiastic about user fees; about 42 percent suggested them as a way of funding. Respondents in region 5 (south central) were more likely than respondents in the other regions to feel that user fees should pay for outdoor recreation programs, but the differences among the regions were not significant.

Table 1.5

Preferences for Funding Outdoor Recreation Services and Programs
by Residence and License Status

(In Percentages)

	User Fees	State General Fund	Both	Other	Total	*Number of Respondents*[a]
All respondents	46.1	28.3	16.4	9.2	100.0	*1,217*
Residence, by DFWP region						
Region 1	42.5	25.8	20.8	10.9	100.0	*120*
Region 2	45.9	30.1	15.3	8.7	100.0	*209*
Region 3	39.4	35.8	15.0	9.8	100.0	*193*
Region 4	46.2	25.8	16.8	11.2	100.0	*279*
Region 5	52.5	24.0	17.1	6.4	100.0	*217*
Region 6	46.6	28.2	14.6	10.6	100.0	*103*
Region 7	49.0	29.2	14.6	7.2	100.0	*96*
Residence, by county size[b]						
Seven largest counties	45.8	27.4	17.9	8.9	100.0	*708*
All other counties	46.6	29.5	14.1	9.8	100.0	*509*
License status						
DFWP license holder	42.5	31.1	16.9	9.5	100.0	*724*
Nonholder	51.3	24.1	15.6	9.0	100.0	*493*

Note: Percentage detail may not add to 100.0 due to rounding.
[a]Twenty persons (or 1.6 percent of the total sample) did not respond.
[b]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

It should be noted that, in this section, we are talking about the general approach to funding outdoor recreation services and programs overall. Later chapters include discussions on funding approaches for specific types of outdoor recreation programs and services; in those specific cases, there was more variation in the responses.

Respondents were also asked if there were any particular outdoor recreation services or programs which should be provided which are not provided now. Apparently most respondents are satisfied with current programs; a significant proportion, 80 percent, did not feel that any additional services or programs should be included (table 1.6). Place of residence and license status apparently were not significant; the distributions of responses in the various respondent groups were relatively similar to those recorded for all the respondents as a whole.

On the other side of the coin, the respondents were also asked whether they felt any outdoor recreation services or programs now provided should be eliminated. Again, an overwhelming majority -- this time over 85 percent -- expressed satisfaction with current programs by saying that no programs should be eliminated. Respondents in region 6 (northeast) were more likely to be satisfied; over 93 percent said "no." A relatively smaller percentage of satisfaction was recorded in region 1 (northwest) -- about 77 percent felt that no programs should be eliminated -- but this response should still be interpreted as confirmation that the respondents are relatively satisfied with current recreation services and programs in general.

Table 1.6

Attitudes toward Revision of Recreation Services and Programs
by Residence and License Status

(In Percentages)

	Add New Programs or Services					Eliminate Any Program or Service				
	Yes	No	Other	Total	*Number of Respondents*[a]	Yes	No	Other	Total	*Number of Respondents*[a]
All respondents	17.0	80.7	2.4	100.0	*1,231*	11.8	85.3	2.9	100.0	*1,231*
Residence, by DFWP region										
Region 1	19.7	78.7	1.6	100.0	*122*	18.0	77.0	4.9	100.0	*122*
Region 2	16.0	80.2	3.8	100.0	*212*	7.6	88.2	4.3	100.0	*211*
Region 3	15.5	81.4	3.1	100.0	*194*	19.6	77.8	2.6	100.0	*194*
Region 4	18.0	80.3	1.8	100.0	*284*	9.5	88.0	2.5	100.0	*283*
Region 5	14.7	83.9	1.4	100.0	*217*	13.6	84.1	2.3	100.0	*220*
Region 6	16.3	80.8	2.9	100.0	*104*	3.9	93.2	2.9	100.0	*103*
Region 7	21.4	76.5	2.0	100.0	*98*	8.2	90.8	1.0	100.0	*98*
Residence, by county size[b]										
Seven largest counties	16.2	81.4	2.4	100.0	*714*	11.6	85.6	2.8	100.0	*715*
All other counties	18.0	79.7	2.3	100.0	*517*	12.0	84.9	3.1	100.0	*516*
License status										
DFWP license holder	18.5	79.5	1.9	100.0	*728*	12.8	84.6	2.6	100.0	*729*
Nonholder	14.7	82.3	3.0	100.0	*503*	10.4	86.3	3.4	100.0	*502*

Note: Percentage detail may not add to 100.0 due to rounding.
[a]Six persons (or 0.5 percent of the total sample) did not respond.
[b]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

CHAPTER 2

PARK AND RECREATION SITES PROGRAM

A primary purpose of the survey was to learn as much as possible about Montanans' attitudes toward current state fisheries, hunting and wildlife, and park programs. This chapter and the two following chapters will deal with each of these. Respondents' attitudes toward current practices and programs were surveyed, as well as their attitudes toward possible revisions, including changes in funding.

State Park and Recreation Area Visitation and Awareness

Respondents were asked if they had visited any state or federal park or recreation sites in Montana in the last five years. As indicated in table 2.1, nearly 80 percent of the respondents said they had. Only one-fifth indicated they had not. There were differences among the seven administrative regions. Those in region 1 (northwest) were the most likely to have visited a state or federal recreation site within the past five years; over 84 percent reported doing so. In comparison, about 63 percent of the respondents who lived in region 7 (southeast) reported having visited such an area.

Urban residents (in the seven largest counties) were also more likely to have visited a federal or state recreation site since 1975. More than 83 percent reported doing so, while about 74 percent of the respondents in the rest of the state reported that they had. And, more license

holders than nonholders said they had visited a federal or state site (83 percent versus 74 percent).

Visits to Park and Recreation Sites in 1979. Those respondents who reported they had visited a state or federal park or site since 1975 were asked how many times they had done so in 1979. Nearly 80 percent of the respondents answering the question said they had visited a state or federal area at least once in 1979 (table 2.1). Over half reported between one and five visits, 13 percent recorded between six and ten visits, and about 12 percent said they had made over ten visits. Among the seven regions, those in region 3 (southwest) were most likely to have done so; about 84 percent reported one or more visits in 1979. In contrast, about 56 percent of those in region 7 (southeast) said they had visited a state or federal park or recreation site during 1979.

Respondents in the seven largest counties were more likely than those in the rest of the state to have visited a recreation area. About 82 percent reported at least one visit, while 72 percent of those in the other counties reported doing so. Not surprisingly, license holders reported a higher 1979 visitation rate than nonholders; over 82 percent reported visiting such a site in 1979, compared to 71 percent of the nonholders.

Following up on this, those who reported visits since 1975 were also asked about visits just to a state park or recreation area in 1979. Slightly less than half (about 49 percent) had visited a state site, and about 16 percent said they didn't know if the place they had visited was operated by the state (table 2.2). Those in region 1 (northwest) were

Table 2.1

Visits to State or Federal Recreation Sites in Montana
by Residence and License Status

(In Percentages)

	Visited State or Federal Site within Last Five Years[a]			Visits to State or Federal Site in 1979[b]				
	Yes	No	*Number of Respondents*	None	1 to 5 Visits	6 to 10 Visits	Over 10 Visits	*Number of Respondents*
All respondents	79.4	20.0	*1,237*	21.4	52.6	13.4	12.2	*982*
Residence, by DFWP region								
Region 1	84.4	13.9	*122*	16.5	45.6	17.5	19.4	*103*
Region 2	78.8	20.3	*212*	21.6	58.7	9.6	9.6	*167*
Region 3	80.5	19.5	*195*	15.9	50.3	21.7	12.1	*157*
Region 4	81.8	17.2	*285*	18.0	57.9	11.6	12.0	*233*
Region 5	81.8	18.2	*220*	21.1	53.3	14.4	11.1	*180*
Region 6	76.9	23.1	*104*	31.3	50.0	10.0	8.8	*80*
Region 7	62.6	36.4	*99*	43.5	35.5	4.8	16.1	*62*
Residence, by county size[c]								
Seven largest counties	83.4	15.9	*717*	17.1	54.0	14.5	14.0	*598*
All other counties	73.8	25.6	*520*	28.1	50.5	11.7	9.4	*384*
License status								
DFWP license holder	83.2	16.2	*730*	17.3	52.2	15.7	14.8	*607*
Nonholder	74.0	25.4	*507*	28.0	53.3	9.9	8.0	*375*

[a]Percentage detail does not add to 100.0 because miscellaneous responses have been omitted from the table.
[b]Asked only of those who reported they had visited a federal or state site within the past five years (approximately 79 percent of the total sample). Percentage detail does not add to 100.0 due to rounding and the omission of those who said they did not know the type of site they had visited (0.3 percent of those who were asked the question).
[c]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

Table 2.2

Visits to State Recreation Sites in Montana, 1979
by Residence and License Status

(In Percentages)

	None	Don't Know	1 to 5 Visits	6 to 10 Visits	Over 10 Visits	*Number of Respondents*
All respondents	34.7	16.4	35.9	7.9	5.0	*982*
Residence, by DFWP region						
Region 1	28.2	12.6	40.8	9.7	8.7	*103*
Region 2	34.7	18.0	38.3	6.6	2.4	*167*
Region 3	32.5	14.0	39.5	8.9	5.1	*157*
Region 4	33.0	19.3	34.3	7.7	5.6	*233*
Region 5	34.4	21.1	34.4	7.2	2.8	*180*
Region 6	41.3	11.3	33.8	10.0	3.8	*80*
Region 7	50.0	6.5	25.8	6.5	11.3	*62*
Residence, by county size[a]						
Seven largest counties	31.3	18.4	37.0	8.4	5.0	*598*
All other counties	40.1	13.3	34.4	7.3	4.9	*384*
License status						
DFWP license holder	30.8	13.8	38.9	10.2	6.3	*607*
Nonholder	41.1	20.5	31.2	4.3	2.9	*375*

Notes: Asked only of those who reported they had visited a federal or state park or recreation site within the past five years (approximately 79 percent of the total sample). Percentage detail does not add to 100.0 due to rounding.

[a]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

most likely to have visited a state site (about 59 percent said they had), while those in region 7 (southeast) were the least likely (about 43 percent said they had).

The responses among those in the seven largest counties and those in the other forty-nine counties were relatively similar. Over 50 percent of those in the largest counties visited a state site in 1979, and about 47 percent of those in the other counties had done so. And, license holders were more likely to have visited a state park or recreation site than were nonholders.

Awareness of State Site Ownership. Those respondents who indicated they had visited a state or federal recreation site since 1975 were asked if, generally speaking, they usually notice when visiting an area whether it is operated by the state. Of those asked, nearly 54 percent indicated they were aware (table 2.3). Forty-four percent said they were not usually aware, and the rest gave other responses. Among the various regions, those in region 2 (west central) claimed the highest awareness (60 percent), but the differences between the regions was not found to be statistically significant. These numbers should be interpreted with caution, as the following discussion suggests. Respondents' perceptions of their awareness and their actual awareness can often be quite different.

Proximity to State Recreation Areas. Respondents were asked whether they resided within fifty miles of a state park or recreation site. Over two-thirds of the total sample said they did. About 20 percent said they did not, while about 11 percent were not sure (table 2.4).

Table 2.3

Awareness of State Operation of Parks and Recreation Sites by Residence and License Status

(In Percentages)

	Aware	Not Aware	*Number of Respondents*
All respondents	53.7	44.2	*984*
Residence, by DFWP region			
Region 1	54.8	39.4	*104*
Region 2	60.5	37.1	*167*
Region 3	53.2	46.8	*156*
Region 4	54.2	43.6	*236*
Region 5	48.3	49.4	*178*
Region 6	50.0	48.8	*82*
Region 7	52.5	45.9	*61*
Residence, by county size[a]			
Seven largest counties	52.6	45.1	*599*
All other counties	55.3	42.9	*385*
License status			
DFWP license holder	56.3	41.6	*606*
Nonholder	49.5	48.4	*378*

Notes: Asked only of those who said they had visited a state or federal park or recreation site within the past five years (approximately 79 percent of the total sample). Percentage detail does not add to 100.0 because miscellaneous responses have been omitted from the table.

[a]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

Table 2.4

Proximity to State Park or Recreation Sites and Accuracy of Response
by Residence and License Status

(In Percentages)

	Reside within Fifty Miles of State Site[a]				Accuracy of Site Named[b]			
	Yes	No	Other Response	*Number of Respondents*	Accurately Named	Inaccurately Named	Unable to Identify	*Number of Respondents*
All respondents	68.0	20.5	11.6	*1,236*	35.9	49.8	14.3	*811*
Residence, by DFWP region								
Region 1	84.4	11.5	4.1	*122*	42.6	43.6	13.9	*101*
Region 2	72.2	13.2	14.6	*212*	25.7	52.7	21.6	*148*
Region 3	71.6	17.5	10.8	*194*	47.3	45.0	7.6	*131*
Region 4	68.1	20.4	11.6	*285*	27.4	59.5	13.2	*190*
Region 5	61.8	22.7	15.5	*220*	22.3	56.9	20.8	*130*
Region 6	51.0	36.5	12.5	*104*	54.9	37.3	7.8	*51*
Region 7	62.6	31.3	6.1	*99*	65.0	28.3	6.7	*60*
Residence, by county size[c]								
Seven largest counties	71.1	15.8	13.1	*717*	30.5	51.8	17.7	*492*
All other counties	63.6	27.0	9.4	*519*	44.2	46.7	9.1	*319*
License status								
DFWP license holder	73.8	18.1	8.1	*730*	39.2	46.7	14.0	*520*
Nonholder	59.5	23.9	16.6	*506*	29.9	55.3	14.8	*291*

[a]Percentage detail does not add to 100.0 due to rounding. One person (or 0.1 percent of the total sample) did not respond.
[b]Evaluation made of the responses of those who said they lived within fifty miles of a state park or recreation site (approximately 68 percent of the total sample). Only the accuracy of the site's name was checked; accuracy of the actual site location was not evaluated. Percentage detail does not add to 100.0 due to rounding. Twenty-nine persons (or 3.5 percent of those eligible to answer the question) did not respond.
[c]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

Respondents in region 1 (northwest) were far more likely to answer "yes" to this question; over 84 percent said they resided within fifty miles of a state park or recreation site. Approximately 72 percent of the respondents in the other two western regions (2 and 3) indicated they lived in proximity to a state recreation area.

A primary purpose of this was really to evaluate the respondents' awareness of state-operated recreation sites. Thus, those who said they lived near a state site were then asked to name the area or areas they lived closest to. The accuracy of the name was then checked against a list of all state recreation parks and sites. Only the accuracy of the name was evaluated; whether the area was, indeed, within fifty miles of the respondents' place of residence was not evaluated.

Results indicate that the respondents' actual awareness of state recreation sites is slightly different than their preceived awareness (as reported in table 2.3). Sixty-eight percent of the respondents said they did reside within fifty miles of a park or recreation area; but when the site or sites named by those respondents were evaluated, only about 36 percent of those answering (or roughly 291 respondents) accurately named a state park or recreation area. Almost half inaccurately named a site, and 14 percent were unable to name any site (table 2.4).

Those in region 7 (southeast) were most likely to correctly name a state site; 65 percent were correct. Respondents from region 2 (west central) were the least likely to be accurate, as only about one-fourth correctly named a state park or recreation area. Those in the seven largest counties were less likely to be correct than were those in the other

counties (about 30 percent versus 44 percent). License holders were more accurate in naming a state site than were nonholders, but by a smaller margin than that reflected by respondents from the two multicounty areas: 39 percent of the license holders were accurate, while about 30 percent of the nonholders correctly named a state area.

Program Revision

Respondents were asked if, thinking ahead to the next five or ten years, the state should be purchasing land for new or expanded park or recreation sites. About 46 percent of the respondents favored the idea, while 44 percent were opposed (table 2.5). The remaining respondents answered with various miscellaneous comments. Respondents in region 5 (south central) were more likely to favor the idea, and those in region 6 (northeast) were weakest in their support (50 percent versus 35 percent, respectively). Those who lived in the seven largest counties also showed relatively more support, with about 52 percent favoring state purchase of land for new or expanded sites, while those in the remaining counties were less favorable (37 percent). As might be expected, license holders, who are more likely to be recreation enthusiasts, were more supportive of site development or expansion than were nonholders (50 percent compared with about 39 percent).

New Site Location. To follow up this question, respondents were asked where additional parks or recreation areas should be located if additional sites are developed. About 41 percent said new sites should be located closer to the state's larger population areas (table 2.5).

Table 2.5

Opinions regarding New or Expanded State Recreation Sites within Next Five to Ten Years
by Residence and License Status

(In Percentages)

	State Purchase of Land for New or Expanded Sites[a]			Preferred Location of New Sites, if Developed[b]				
	Favor	Oppose	*Number of Respondents*	Near Large Population Areas	In Less Populated Areas	In Both Locations	Wherever Needed	*Number of Respondents*
All respondents	45.7	44.3	*1,218*	40.7	31.3	9.8	7.9	*1,221*
Residence, by DFWP region								
Region 1	49.6	43.8	*121*	35.2	35.2	14.8	4.9	*122*
Region 2	49.5	42.3	*208*	40.0	30.0	12.9	8.6	*210*
Region 3	50.0	41.7	*192*	44.7	29.8	10.1	8.0	*188*
Region 4	40.0	45.0	*280*	40.7	30.0	7.1	8.9	*280*
Region 5	50.5	44.0	*216*	48.6	27.3	8.6	4.5	*220*
Region 6	35.0	53.4	*103*	37.5	32.7	6.7	7.7	*104*
Region 7	41.8	43.9	*98*	26.8	43.3	10.3	10.3	*97*
Residence, by county size[c]								
Seven largest counties	51.6	39.4	*708*	44.9	28.4	10.1	7.2	*711*
All other counties	37.6	51.2	*510*	34.9	35.3	9.4	8.0	*510*
License status								
DFWP license holder	50.4	41.3	*722*	41.2	31.1	10.4	7.9	*724*
Nonholder	38.9	48.8	*496*	40.0	31.6	9.1	7.0	*497*

[a]Percentage detail does not add to 100.0 because miscellaneous responses have been omitted from the table. Nineteen persons (or 1.5 percent of the total sample) did not respond.
[b]Percentage detail does not add to 100.0 because miscellaneous responses have been omitted from the table. Sixteen persons (or 1.3 percent of the total sample) did not respond.
[c]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

Thirty-one percent preferred that any new developments be located in Montana's less populated areas. Almost 10 percent felt any new sites should be located in both areas, and 8 percent said that the recreation areas should be wherever they are needed.

Respondents from region 5 showed greater support for locating new state recreation sites near large population areas. Respondents from region 7, on the other hand, were the most likely to say that new sites should be located in the state's less populated areas. Those who lived in the seven more populous counties tended to want any new recreation sites located near large population areas; the preferences among those who resided in the other less populous counties, however, were pretty evenly divided between large population areas and less populated areas. License status did not influence response to this question; license holders and nonholders showed similar response patterns, with the preference being for locating any new sites near the large population areas.

Types of Sites Preferred. Respondents were also asked what type of recreation sites and parks they would prefer, if additional state facilities are provided. Several different types of sites were suggested, and many respondents chose more than one type. There was a relatively high nonresponse rate (over 17 percent of the total sample); all respondents were asked this question, and those who had reflected in an earlier answer that they were opposed to development of additional sites were more likely not to respond.

About half of those who answered said that additional state recreation sites should include camping and picnic areas (table 2.6).

Table 2.6 (continued)

Type of Additional State Recreation Sites Preferred
by Residence and License Status

(In Percentages)

	Hunting Access Areas	Snowmobiling Access Areas	Off-road Vehicle Access Areas[a]	Cross-country Skiing Access Areas	Water Recreation Areas[b]	Primitive and Roadless Areas[c]	*Number of Respondents*
All respondents	17.5	14.8	13.1	17.3	6.6	8.6	*1,017*
Residence, by DFWP region							
Region 1	13.7	13.7	10.8	18.6	6.9	11.8	*102*
Region 2	14.3	14.3	14.3	20.6	5.7	8.6	*175*
Region 3	22.2	13.3	11.4	19.0	3.2	9.5	*158*
Region 4	20.2	17.2	12.0	18.0	7.7	7.3	*233*
Region 5	15.9	14.3	13.8	15.3	5.8	10.1	*189*
Region 6	9.6	14.5	14.5	12.0	8.4	3.6	*83*
Region 7	24.7	15.6	16.9	13.0	11.2	7.8	*77*
Residence, by county size[d]							
Seven largest counties	18.6	14.4	13.9	19.5	6.4	9.4	*596*
All other counties	15.9	15.4	11.9	14.3	6.9	7.4	*421*
License status							
DFWP license holder	21.7	16.0	13.6	16.9	6.2	7.6	*632*
Nonholder	10.6	13.0	12.2	17.9	7.3	10.1	*385*

Notes: Percentage detail does not add to 100.0 because most respondents named more than one type of site. Two hundred twenty persons (or 17.8 percent of the total sample) did not respond; many of these had reported in a preceding question that they felt the state already had enough sites and chose not to respond to this question. Some miscellaneous responses were omitted from the table.

[a] Includes areas for motorcycles and four-wheel drive vehicles.

[b] Includes river access, boating areas, swimming areas; excludes fishing access areas.

[c] Includes areas generally used for backpacking and hiking.

[d] The seven largest counties had populations over 30,000 in 1980; all other counties had fewer than 25,000 residents each.

Table 2.6

Type of Additional State Recreation Sites Preferred
by Residence and License Status

(In Percentages)

	Camping and Picnic Sites	Snow Park Areas[a]	Historical Parks	Game Ranges[b]	Waterfowl Areas	Fishing Access Areas	*Number of Respondents*
All respondents	50.4	9.9	15.6	15.4	13.5	41.0	*1,017*
Residence, by DFWP region							
Region 1	51.0	8.8	12.7	19.6	14.7	35.3	*102*
Region 2	49.1	9.7	18.9	16.6	14.3	36.6	*175*
Region 3	46.2	8.2	17.7	13.9	10.1	47.5	*158*
Region 4	50.6	13.3	12.9	18.0	15.0	39.1	*233*
Region 5	51.9	9.0	15.3	11.6	10.6	46.0	*189*
Region 6	57.8	7.2	15.7	12.0	14.5	32.5	*83*
Region 7	49.4	10.4	16.9	15.6	18.2	48.1	*77*
Residence, by county size[c]							
Seven largest counties	52.0	11.4	16.4	16.9	14.3	44.0	*596*
All other counties	48.2	7.8	14.5	13.3	12.4	36.8	*421*
License status							
DFWP license holder	47.2	10.0	14.4	16.6	13.6	49.8	*632*
Nonholder	55.8	9.9	17.7	13.5	13.2	26.5	*385*

Notes: Percentage detail does not add to 100.0 because most respondents named more than one type of site. Two hundred twenty persons (or 17.8 percent of the total sample) did not respond; many of these had reported in a preceding question that they felt the state already had enough sites and chose not to respond to this question. Some miscellaneous responses were omitted from the table.

[a] Includes skiing and sledding areas.

[b] Includes animal reserves and wildlife preserves.

[c] The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

The next most frequently mentioned type of site was fishing access areas, named by 41 percent of the respondents.

Other types of recreation areas were mentioned much less frequently. Hunting access sites and access areas for cross-country skiing were mentioned by 17 percent of the respondents. Over 15 percent mentioned historical and cultural park areas and game ranges, including animal reserves and wildlife preserves. Slightly under 15 percent indicated new sites should include access areas for snowmobiling. Thirteen percent chose waterfowl areas, and the same proportion wanted access areas for motorbiking, including off-road areas for four-wheel drive vehicles and motorcycles. Just under 10 percent indicated they wanted "snow park" areas developed for sledding, skiing, and other winter activities. And 8 percent said they wanted additional primitive and roadless areas that can be used generally for backpacking and hiking. About 6 percent said that additional water recreation areas (excluding fishing access areas) should be provided.

Respondents in the seven regions and in the two multicounty areas were generally in agreement with the respondents as a whole. The only significant difference was between license holders and nonholders. Not surprisingly, license holders were more likely to request additional fishing and hunting access areas. Almost 50 percent of the license holders responding indicated that new fishing access areas are needed; only 26 percent of the nonholders named this type of site. And nearly 22 percent of the license holders named hunting access sites, while only about 10 percent of nonholders did so.

Funding Awareness

To assess respondents' perceptions and awareness of the funding sources for the state's system of park and recreation sites, they were asked to name what they thought were the major funding sources. These results are shown in table 2.7. Some respondents named more than one source, and more sources than those listed in the table were named. However, those sources named by a significant number of respondents are listed.

Slightly over half of the respondents mentioned the state general fund(s) or a similar response. Over 23 percent mentioned the revenue collected from the sale of hunting, fishing, and other licenses. About 9 percent named federal funds. Almost one-fourth were not able to name any funding sources.

When analyzed according to administrative regions, no statistically significant differences were found. In all seven regions, the state general fund(s) was the funding source most frequently mentioned. License revenue was the second most frequently mentioned source, with federal funds a distant third. Respondents who could not name a funding source ranged from 20 percent in region 5 (south central) to 34 percent in region 7 (southeast).

A significant difference was found between those in the seven largest counties and those in the rest of the state. Almost 56 percent of those in the seven largest counties mentioned the state general fund as a source which supports the parks program, while 44 percent of the respondents in the other counties named this funding source. About the same proportions in each multicounty group mentioned license revenues and federal funds.

Table 2.7

Respondents' Opinions and Awareness regarding Sources of Funding for State Recreation Sites
by Residence and License Status

(In Percentages)

	Sources of State Site Funding as Cited by Respondents[a]					Actual Sources Accurately Named by Respondents[b]			
	State General Fund	Hunting and Fishing Licenses	Federal Funds	Don't Know	*Number of Respondents*	None	1	2 or More	*Number of Respondents*
All respondents	51.0	23.6	8.9	24.9	*1,230*	31.1	50.0	18.9	*1,237*
Residence, by DFWP region									
Region 1	47.5	25.4	9.8	25.4	*122*	34.4	44.3	21.3	*122*
Region 2	57.1	19.5	12.4	22.4	*210*	29.2	48.1	22.6	*212*
Region 3	47.9	25.8	8.2	24.7	*194*	31.3	52.8	15.9	*195*
Region 4	51.8	26.6	7.8	24.1	*282*	28.8	49.5	21.8	*285*
Region 5	56.2	22.4	11.4	20.1	*219*	26.4	54.1	20.0	*220*
Region 6	46.2	22.1	3.8	32.7	*104*	39.4	47.1	13.5	*104*
Region 7	39.4	21.2	5.1	34.3	*99*	39.4	50.5	10.1	*99*
Residence, by county size[c]									
Seven largest counties	55.8	25.2	10.7	19.9	*713*	26.4	51.7	21.9	*717*
All other counties	44.3	21.3	6.6	31.7	*517*	37.7	47.5	14.8	*520*
License status									
DFWP license holder	51.0	30.1	9.5	21.7	*727*	27.7	51.4	21.0	*730*
Nonholder	50.9	14.1	8.2	29.4	*503*	36.1	47.9	16.0	*507*

[a]Reflects what the respondents believe are the funding sources, whether accurate or not. Percentage detail does not add to 100.0 because some respondents named more than one funding source. Miscellaneous responses were omitted from the table. Seven persons (or 0.6 percent of the total sample) did not respond.
[b]Percentage detail does not add to 100.0 due to rounding.
[c]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

About half of license holders and nonholders mentioned the state general fund. However, license holders were much more likely to mention license revenues as a source; 30 percent of the license holders mentioned this source, compared with 14 percent of the nonholders. About equal proportions of both license holders and nonholders mentioned federal funds.

According to a Department report entitled *Design for Tomorrow, 1977-1990*, published in 1978, the Montana parks program is funded by the following: license revenues (which provide 17 percent of program revenue), boat and snowmobile gas tax (25 percent), the coal tax and matching funds (10 percent), the state general fund (23 percent), federal Land and Water Conservation Funds (11 percent), parks earned revenue (9 percent), and boat and snowmobile licenses (5 percent). As indicated in table 2.7, the respondents apparently are aware of license revenue, state general fund money, and federal funds as sources of revenue for the state parks program. The other sources which are actually used were mentioned by only a very few respondents.

The overall accuracy of the respondents' answers to this question, or their awareness, is also shown in table 2.7. Half the respondents were able to accurately name one funding source. About 19 percent correctly named two or more of the funding sources. A significant proportion -- 31 percent -- were unable to identify correctly any source of funds for the parks program.

Respondents in the various administrative regions named funding sources with about the same accuracy as did the respondents as a whole. While

more respondents in the seven largest counties than in the rest of the state were accurate about the funding sources, the differences were not statistically significant. The accuracy of responses among license holders was slightly higher than that of nonholders, but, again, the difference was not statistically significant.

Respondents' Overall Rating of the Park and Sites Program

Respondents were asked, in general, what their feelings were regarding the state's maintenance of its parks and recreation sites. Over three-fourths of those responding said that the state does a "very good" or "good" job (table 2.8). About 16 percent said the state does a "fair" job, and only 2 percent said the state does a "poor" job. No statistically significant differences were found among the various regions; those in the seven largest counties and in the other forty-nine counties were also generally in agreement. License holders and nonholders also tended to agree that the state does a very good or good job maintaining its system of parks and recreation sites.

Table 2.8

Evaluation of State Operation of Parks and Recreation Sites by Residence and License Status

(In Percentages)

	Very Good	Good	Fair	Poor	*Number of Respondents*
All respondents	20.2	56.8	16.7	2.1	*1,219*
Residence, by DFWP region					
Region 1	18.2	54.4	19.8	4.1	*121*
Region 2	21.2	54.3	17.8	0.5	*208*
Region 3	19.6	58.2	14.9	2.1	*194*
Region 4	23.1	55.2	16.7	1.8	*281*
Region 5	16.1	64.5	14.3	2.8	*217*
Region 6	20.4	55.3	17.5	2.9	*103*
Region 7	22.1	51.6	17.9	2.1	*95*
Residence, by county size[a]					
Seven largest counties	19.8	58.7	16.7	1.3	*712*
All other counties	20.7	54.2	16.6	3.4	*507*
License status					
DFWP license holder	19.8	56.9	18.6	2.2	*722*
Nonholder	20.7	56.7	13.9	2.0	*497*

Notes: Percentage detail does not add to 100.0 because miscellaneous responses have been omitted from the table. Eighteen persons (or 1.4 percent of the total sample) did not respond).

[a]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

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CHAPTER 3

FISHING AND THE FISHERIES PROGRAM

Fishing is among the most popular outdoor recreation activities in Montana. When asked if they ever fish in Montana, 855 of 1,235 respondents, or 69 percent, said that they do. Further, almost 59 percent said they had fished during 1979.

Preferences regarding Sites and Limits

The fishing enthusiasts were asked about where they preferred to fish -- at what kinds of sites. Overall, 59 percent stated that they preferred streams and rivers, and about 32 percent favored lakes and reservoirs; another 9 percent mentioned other sites, such as ponds (table 3.1). There is a systematic variation, however, among the respondents in their preferences, with a tendency toward streams and rivers in region 1 (northwest) and toward lakes and reservoirs in region 6 (northeast) and region 7 (southeast). This trend probably reflects the geography of Montana, with streams and rivers more convenient for fishermen in western Montana and reservoirs more accessible in the prairies in the eastern part of the state. The preferences of residents in the seven largest counties for stream and river fishing is probably due to the fact that most of Montana's urban areas are in the western portion of the state.

In terms of limits, Montana fishing enthusiasts overwhelmingly preferred to catch a few large fish rather than many small fish. Given

Table 3.1

Preferences regarding Fishing Location and Fishing Limits
by Residence and Fishing Participation

(In Percentages)

	-- Preferred Fishing Location[a] --			-- More Fish vs. Fewer but Larger Fish[b] --			
	Streams and Rivers	Lakes and Reservoirs	Other	More Fish	Fewer but Larger Fish	Do Not Care	*Number of Respondents*[c]
All respondents	59.4	31.5	9.1	29.0	58.4	8.1	*855*
Residence, by DFWP region							
Region 1	54.2	34.0	11.7	29.8	55.3	9.6	*94*
Region 2	60.8	28.4	10.8	20.3	69.6	5.4	*148*
Region 3	71.6	19.9	8.5	31.7	58.5	7.0	*142*
Region 4	57.4	30.3	12.3	31.8	51.3	11.3	*195*
Region 5	63.8	30.9	5.4	29.5	60.4	6.7	*149*
Region 6	47.1	50.0	2.9	29.9	56.7	7.5	*67*
Region 7	45.0	46.7	8.3	31.7	55.0	8.3	*60*
Residence, by county size[d]							
Seven largest counties	62.9	28.4	8.6	29.4	57.7	8.2	*511*
All other counties	54.2	35.9	9.9	28.5	59.3	7.8	*344*
Fishing participation in 1979							
Did not fish in Montana	63.8	39.4	6.9	29.0	55.6	9.9	*162*
Did fish in Montana	58.4	31.9	9.6	29.0	59.0	7.6	*693*
1 day	54.5	40.9	4.5	38.1	38.1	19.0	*21*
2- 5 days	59.2	33.3	7.5	32.7	56.5	7.5	*147*
6- 10 days	65.1	26.5	8.4	30.5	55.0	8.4	*131*
11- 30 days	55.1	33.5	11.4	30.1	59.9	5.5	*272*
31- 50 days	63.7	30.9	5.5	23.6	61.8	10.9	*55*
51-100 days	51.0	32.1	17.0	17.0	71.7	7.5	*53*
Over 100 days	64.3	28.5	7.1	7.1	78.6	14.3	*14*

[a]Percentage detail may not add to 100.0 due to rounding.
[b]Percentage detail does not add to 100.0 because miscellaneous responses (such as "other" responses) have been omitted from the table.
[c]Asked only of those who said that they fish in Montana (excludes those who never fish in Montana).
[d]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

this choice, 58 percent of the respondents said they preferred fewer but larger fish, compared to 29 percent who opted for more fish. Approximately 8 percent said they did not care. The pattern of responses, about two to one in favor of fewer but larger fish, is remarkably stable among the administrative regions and multicounty groups. There was, however, a strong preference among avid fishermen (fifty-one or more days in 1979) toward fewer but larger fish.

Fishing Access Sites

All the respondents, not just the enthusiasts, were queried concerning their views about state fishing access sites -- that is, those maintained by the Department of Fish, Wildlife, and Parks. Approximately 51 percent of the respondents thought that more should be obtained during the next five to ten years, while 37 percent believed there were enough already (table 3.2). The remaining 13 percent had no opinion or gave some other answer.

There were sizable differences among the respondents concerning their views about state-maintained fishing access sites. The proportion of the respondents desiring more access sites was highest in region 3 (southwest) and region 5 (south central) and lowest in region 4 (north central) and region 6 (northeast). Urban dwellers were more favorable toward additional sites than were those living in rural areas: approximately 55 percent of the respondents living in the seven largest counties felt that more sites should be obtained, compared to 45 percent in the remaining counties. Not surprisingly, additional access sites were most popular among fishing enthusiasts: fifty-nine percent of the respondents who fished

Table 3.2

Opinions regarding the Need for More State Fishing Access Sites
in the Next Five to Ten Years
by Residence and Fishing Participation

(In Percentages)

	State Should Obtain More	Have Enough Already	*Number of Respondents*
All respondents	50.8	37.2	*1,194*
Residence, by DFWP region			
Region 1	48.7	34.5	*119*
Region 2	51.2	39.6	*207*
Region 3	56.6	33.3	*189*
Region 4	42.8	44.6	*271*
Region 5	63.4	26.3	*213*
Region 6	38.1	46.4	*97*
Region 7	49.0	36.7	*98*
Residence, by county size[a]			
Seven largest counties	54.9	34.1	*692*
All other counties	45.2	41.4	*502*
Fishing participation in 1979			
Did not fish in Montana	38.5	43.2	*481*
Did fish in Montana	59.2	33.1	*713*
1 day	56.0	32.0	*25*
2- 5 days	54.0	35.4	*161*
6-10 days	56.4	33.1	*133*
11-30 days	62.0	32.1	*271*
31-50 days	66.7	27.8	*54*
51-100 days	58.2	38.2	*55*
Over 100 days	71.4	28.6	*14*

Notes: The percentage detail does not add to 100.0 because miscellaneous responses, such as "other" responses, have been omitted from the table. Also, forty-three persons (or 3.5 percent of the total sample) did not respond.

[a]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

in Montana during 1979 said that more sites were needed and 33 percent thought there were enough already. In comparison, only about 38 percent of those not fishing in 1979 were in favor of more sites and 43 percent were satisfied with the existing sites.

Warm Water Fisheries Program

Respondents who indicated they had ever fished in Montana (not necessarily in 1979) were asked if they thought more emphasis should be placed on warm water fish, such as walleye, northerns, and bass. About 43 percent indicated that they favored the increased emphasis and about 46 percent were opposed (table 3.3). There were sharp geographic differences, however, in the pattern of the responses. Those living in eastern Montana (where there are more opportunities for warm water fishing) were more apt to favor expansion in the warm water program that were those in western Montana. Notice, for example, that about 67 percent of the respondents in region 7 (southeast) and about 63 percent in region 6 (northeast) approved of the expansion, while only about 34 percent in region 2 (west central) and 38 in region 4 (north central) approved.

Those who favored increased emphasis on warm water fishing were further questioned about methods for financing the expanded program. Increased fishing license fees were favored by 75 percent and opposed by 18 percent. When asked if they would still favor the expansion of warm water fishing even if it meant a reduction in the cold water (trout) program, about 42 percent still favored expansion but almost 49 percent were now opposed. For the most part, detailed analysis of the warm water program questions was not possible because of the relatively small number

Table 3.3

Preferences of Montana Fishermen regarding the Warm Water Fisheries Program
by Residence and Fishing Participation

(In Percentages)

	Increase State's Emphasis on Warm Water Program			------ Fishermen Favoring Expansion of Warm Water Program -------					
				Increase Fishing License Fees			Reduce Cold Water Program		
	Favor	Oppose	*Number of Respondents*	Favor	Oppose	*Number of Respondents*[a]	Favor	Oppose	*Number of Respondents*[a]
All respondents	43.2	45.7	*843*	75.4	18.0	*378*	42.1	48.9	*380*
Residence, by DFWP region									
Region 1	41.8	49.5	*91*	82.1	17.9	*39*	34.2	52.6	*38*
Region 2	33.8	52.0	*148*	80.7	8.8	*57*	36.7	48.3	*60*
Region 3	39.6	44.6	*139*	71.9	22.8	*57*	29.8	68.4	*57*
Region 4	37.9	50.8	*195*	74.0	19.5	*77*	44.7	52.6	*76*
Region 5	45.9	45.2	*146*	65.7	26.9	*67*	41.2	42.6	*68*
Region 6	62.7	28.4	*67*	86.0	9.3	*43*	58.1	37.2	*43*
Region 7	66.7	29.8	*57*	73.7	15.8	*38*	55.3	34.2	*38*
Residence, by county size[b]									
Seven largest counties	42.3	46.8	*506*	75.6	19.9	*221*	40.2	53.0	*219*
All other counties	44.5	43.9	*337*	75.2	15.3	*157*	44.7	43.5	*161*
Fishing participation in 1979									
Did not fish in Montana	42.1	41.5	*159*	70.4	19.7	*71*	38.0	49.3	*71*
Did fish in Montana	43.4	46.6	*684*	76.5	17.6	*307*	43.0	48.9	*309*
1 day	42.9	47.6	*21*	77.8	11.1	*9*	22.2	77.8	*9*
2- 5 days	43.5	46.9	*147*	81.8	15.2	*66*	32.8	58.2	*67*
6- 10 days	42.2	45.3	*128*	69.6	21.4	*56*	46.4	41.1	*56*
11- 30 days	43.3	45.9	*268*	78.5	14.9	*121*	47.5	44.3	*122*
31- 50 days	33.3	55.6	*54*	77.8	22.2	*18*	44.4	50.0	*18*
51-100 days	56.6	43.4	*53*	70.0	26.7	*30*	50.0	46.7	*30*
Over 100 days	46.2	46.2	*13*	71.4	14.3	*7*	28.6	71.4	*7*

Notes: The questions represented in this table were asked only of Montana fishermen (i.e., those who fish in Montana ever, not just in 1979); excluded were those who said they never fish in Montana. In most cases, the percentage detail does not add to 100.0 because miscellaneous responses have been omitted from the table.

[a]Asked only of those Montana fishermen who favored increased emphasis on the warm water program.

[b]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

of responses. Notice, however, the apparent strong support for expanded warm water fishing (even at the expense of the cold water program) in eastern Montana, especially regions 6 and 7.

Issues Related to Fish Habitat

A few questions were asked regarding certain aspects involved in management of Montana waters especially as this pertains to fish habitat and the environment where people fish. These questions were asked of all respondents, regardless of whether or not they were fishing enthusiasts, and table 3.4 summarizes their responses.

The respondents were first asked whether they favored or opposed efforts by the state to maintain fish habitat by maintaining minimum flows of water in the stream, keeping stream channels from being changed, and similar activities. Efforts by the Department to maintain fish habitat were overwhelmingly approved; overall, about 90 percent of the respondents were in favor and 4 percent opposed.

Reactions to the idea of controlling subdivision activities along rivers with high fishing or recreational value were also recorded. About 88 percent of the respondents felt that subdivision activities should be controlled in some way, while approximately 7 percent were opposed to any regulation. Notice, however, that there appears to be significantly greater opposition in the rural areas and in the administrative regions located in eastern Montana. For example, about 5 percent of the respondents living in the seven largest counties were opposed to such regulation compared to 10 percent among residents in the remaining forty-nine counties. While the results suggest overwhelming approval of this type

Table 3.4

Opinions regarding Selected Activities by the State to Manage Montana Waters
by Residence and Fishing Participation

(In Percentages)

	Maintain Streamflow to Protect Fish Habitat			Regulate Subdivision Activities along Rivers			Control or Schedule Use of Waters during High Use		
	Favor	Oppose	*Number of Respondents*[a]	Favor	Oppose	*Number of Respondents*[b]	Favor	Oppose	*Number of Respondents*[c]
All respondents	90.5	4.4	*1,216*	87.8	7.3	*1,221*	48.9	41.0	*1,228*
Residence, by DFWP region									
Region 1	86.8	5.8	*121*	86.8	7.4	*121*	38.0	46.3	*121*
Region 2	92.3	2.9	*209*	91.9	5.3	*209*	42.1	49.3	*209*
Region 3	90.1	5.2	*192*	88.6	6.2	*193*	50.0	43.3	*194*
Region 4	91.8	3.9	*280*	87.7	6.7	*285*	55.0	34.8	*282*
Region 5	90.8	4.6	*218*	89.9	6.5	*217*	48.4	42.5	*219*
Region 6	88.9	5.1	*99*	79.8	12.1	*99*	54.8	34.6	*104*
Region 7	88.7	4.1	*97*	82.5	12.4	*97*	51.5	33.3	*99*
Residence, by county size[d]									
Seven largest counties	92.9	3.1	*709*	90.7	5.2	*712*	47.1	44.8	*712*
All other counties	87.0	6.1	*507*	83.7	10.2	*509*	51.4	35.7	*516*
Fishing participation in 1979									
Did not fish in Montana	89.9	4.4	*495*	85.4	7.8	*499*	48.9	37.4	*503*
Did fish in Montana	90.8	4.3	*721*	89.4	6.9	*722*	48.8	43.4	*725*
1 day	88.0	0.0	*25*	88.0	4.0	*25*	32.0	52.0	*25*
2- 5 days	92.1	4.2	*165*	91.6	6.0	*166*	53.0	39.2	*166*
6- 10 days	86.4	3.8	*132*	84.3	11.2	*134*	51.1	38.5	*135*
11- 30 days	91.6	5.5	*275*	91.2	5.9	*273*	48.9	44.9	*276*
31- 50 days	94.5	3.6	*55*	89.1	9.1	*55*	36.4	58.2	*55*
51-100 days	90.9	3.6	*55*	90.9	3.6	*55*	47.3	45.5	*55*
Over 100 days	92.9	0.0	*14*	78.6	7.1	*14*	61.5	30.8	*13*

Note: The percentage detail does not add to 100.0 because miscellaneous responses have been omitted from the table.
[a]Twenty-one persons (or 1.7 percent of the total sample) did not respond.
[b]Sixteen persons (or 1.3 percent of the total sample) did not respond.
[c]Nine persons (or 0.7 percent of the total sample) did not respond.
[d]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

of subdivision regulation, they must be interpreted with caution because the respondents may not be equally informed about the various aspects of the topic. For example, urban residents may not be familiar with these types of subdivisions, while rural residents might be more aware of the potential problems associated with regulation, and this may help to explain their greater opposition. Also, had several more specific questions been asked about various degrees of subdivision activity and regulation, a wider range of opinions would likely have been found; the intention, however, was only to get a public reaction to a general idea.

The respondents were also asked about the state controlling or scheduling the use of popular recreation waters during periods of high use -- that is, actively regulating those streams and rivers which are used heavily for fishing, canoeing, and other forms of recreation. Overall, about 49 percent of the respondents favored such regulation and approximately 41 percent were opposed. Of those approving regulation, roughly 66 percent favored the issuing of permits, and approximately 27 percent opposed permits; the remainder said they didn't know or suggested some other form of regulation. (These data are not presented in tabular format.)

Respondents supporting the regulation of subdivisions and the use of popular recreation waters strongly favored the State of Montana as the appropriate regulatory authority. About 75 percent of those who believed subdivisions should be controlled indicated that the State of Montana should be responsible, approximately 7 percent preferred local governments, and the remainder didn't care or mentioned the federal government

or some combination of federal-state-local authority. With respect to use of recreation waters during high use, about 86 percent thought the State of Montana should do the scheduling and be in control; the remainder did not care or preferred some other level of government. (These data are not presented in tabular format.)

Funding of the Fisheries Program

Table 3.5 summarizes the responses to questions concerning the funding of fisheries programs. These questions were also asked of all respondents, not just the fishing enthusiasts.

When asked about raising fishing license fees to cover the increasing costs of the current fisheries programs, about 72 percent of the respondents favored such an increase. Many of the remaining respondents mentioned alternative sources of revenue, such as taxes in general and federal funds. Residents of region 5 (south central) and region 6 (northeast) were, on the average, more favorable toward raising the license fees for this reason than were those living in region 1 (northwest) and region 7 (southeast). Interestingly, about the same percentage of fishermen and nonfishermen (72 percent) were favorable toward increased fishing license fees. Also, respondents with lower household incomes were slightly less likely to approve of raising the license fees, with this tendency most noticeable among respondents reporting household incomes of $5,000 or less in 1979.

The respondents were also queried about the current practice of using hunting fees to fund a sizable portion of the fisheries program. Specifically, they were asked whether or not they favored increasing fishing license fees to fully fund the fisheries program. Overall,

Table 3.5

Opinions regarding Selected Fishing License Fee Changes
by Residence, Fishing Participation, and Income

(In Percentages)

	Favor Increased Fees to Fund Rising Costs of Fisheries Program[a]		Increased Fees to Fully Fund Fisheries Program (No Longer Use Hunting Fees)[b]			
	Percentage of Total	*Number of Respondents*	Favor	Oppose	Don't Know	*Number of Respondents*
All respondents	71.9	*1,228*	49.4	32.2	11.1	*1,224*
Residence, by DFWP region						
Region 1	62.0	*121*	49.6	30.3	10.9	*119*
Region 2	71.2	*208*	44.3	29.5	15.2	*210*
Region 3	72.2	*194*	48.7	35.2	9.3	*193*
Region 4	71.2	*285*	51.4	30.6	10.9	*284*
Region 5	78.4	*218*	51.9	34.3	8.8	*216*
Region 6	78.6	*103*	49.5	32.0	14.6	*103*
Region 7	65.7	*99*	50.5	34.3	8.1	*99*
Residence, by county size[c]						
Seven largest counties	72.5	*712*	50.6	31.7	9.9	*709*
All other counties	71.1	*516*	47.8	32.8	12.8	*515*
Fishing participation in 1979						
Did not fish in Montana	71.8	*504*	51.4	26.7	15.7	*502*
Did fish in Montana	72.0	*724*	48.1	36.0	7.9	*722*
1 day	56.0	*25*	41.7	37.5	20.8	*24*
2- 5 days	75.8	*165*	47.3	30.9	9.7	*165*
6- 10 days	72.1	*136*	50.7	31.3	8.2	*134*
11- 50 days	72.0	*329*	47.3	40.6	6.4	*330*
51-100 days	69.1	*55*	49.1	34.5	5.5	*55*
Over 100 days	64.3	*14*	57.1	35.7	7.7	*14*
Household income in 1979[d]						
$ 5,000 or less	57.1	*84*	46.4	29.8	13.1	*84*
$ 5,001 - $10,000	70.2	*151*	49.7	26.5	13.9	*151*
$10,001 - $15,000	69.3	*199*	43.7	35.7	12.1	*199*
$15,001 - $20,000	74.3	*218*	53.2	29.4	9.6	*218*
$20,001 - $35,000	75.9	*349*	51.1	32.8	10.3	*348*
Over $35,000	75.9	*137*	52.6	35.6	5.9	*135*

[a]Only the affirmative responses are shown, expressed as a percentage of all persons responding. Nine persons (or 0.7 percent of the total sample) did not respond.

[b]In most cases, the percentage detail does not add to 100.0 because the miscellaneous responses have been omitted from the table. Thirteen persons (or 1.1 percent of the total sample) did not respond.

[c]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

[d]The number of respondents does not add to the total shown for all respondents because those who did not repond to the income question were omitted from the tabulation.

about 49 percent said they favored such an increase, while 32 percent were opposed; another 11 percent said they didn't know, and the rest gave other responses. Even though roughly the same proportions of fishermen and nonfishermen favored the increase, a larger percentage of the fishermen were opposed to the proposal (36 percent compared to about 27 percent of the nonfishermen). Interestingly, in a tabulation not shown in table 3.5, hunters were found to resemble fishermen with respect to the use of hunting fees for the fisheries program; that is, about the same proportions favored or opposed this particular proposal.

CHAPTER 4

HUNTING AND WILDLIFE MANAGEMENT PROGRAMS

Several questions in the survey dealt with various aspects of hunting and wildlife management in the state and, of course, with funding for such programs. Over one-third of the respondents reported that they did some hunting in 1979, and the Department reports that the numbers are increasing.

As was done in most of the survey, however, these questions were directed to all respondents, not just those who are actually hunting enthusiasts (who participated in 1979), in order to be able to determine if hunters and nonhunters differ in their opinions in any way.

Limits on the Number of Hunters Allowed

The growing number of persons who hunt in Montana combined with the limits on the amount of game available have led to concerns about the future of quality hunting in the state. The respondents were asked a number of questions concerning limiting the number of hunters, so that each may have a better chance of success. These answers are summarized in table 4.1.

Resident Hunters. When asked whether the number of resident hunters should be limited, about 37 percent of the respondents said they were in favor of such a limit while 48 percent were opposed. The greatest support for restricting resident hunters was in eastern and central Montana.

Table 4.1

Opinions regarding Limiting Resident and Nonresident Hunters
by Residence and Hunting Participation

(In Percentages)

	-- Limit Resident Hunters --			- Limit Nonresident Hunters -			---------- Preferred Nonresident Limit ----------			
	Favor	Oppose	*Number of Respondents*[a]	Favor	Oppose	*Number of Respondents*[b]	Lower than 17,000	No Change (17,000)	Higher than 17,000	*Number of Respondents*[c]
All respondents	36.9	48.2	*1,231*	86.8	10.4	*1,236*	56.0	32.1	1.4	*1,067*
Residence, by DFWP region										
Region 1	25.6	57.0	*121*	86.1	7.4	*122*	61.0	30.5	0.0	*105*
Region 2	30.8	52.6	*211*	85.3	12.8	*211*	52.0	31.3	2.2	*179*
Region 3	29.4	57.7	*194*	86.7	9.2	*195*	56.5	33.3	2.4	*168*
Region 4	42.4	41.7	*283*	87.7	10.2	*285*	53.8	35.7	1.2	*249*
Region 5	44.1	41.4	*220*	90.9	8.2	*220*	62.6	24.2	1.0	*198*
Region 6	38.5	49.0	*104*	82.7	14.4	*104*	51.8	40.0	0.0	*85*
Region 7	44.9	41.8	*98*	83.8	12.1	*99*	53.0	32.5	2.4	*83*
Residence, by county size[d]										
Seven largest counties	35.7	48.9	*712*	87.7	9.5	*716*	57.5	30.4	1.3	*626*
All other counties	38.5	47.2	*519*	85.6	11.5	*520*	54.0	34.5	1.6	*441*
Hunting participation in 1979										
Did not hunt in Montana	41.3	43.5	*795*	84.5	11.9	*800*	51.9	33.5	1.5	*671*
Did hunt in Montana	28.9	56.6	*436*	91.1	7.6	*436*	63.1	29.5	1.3	*396*
1 day	23.8	66.7	*21*	85.7	14.3	*21*	72.2	27.8	0.0	*18*
2- 5 days	26.5	59.3	*113*	85.8	10.6	*113*	59.8	34.0	1.0	*97*
6-10 days	28.6	56.3	*112*	94.6	4.5	*112*	57.1	35.2	2.9	*105*
11-30 days	31.8	52.2	*157*	92.4	7.0	*157*	64.8	24.8	0.7	*145*
Over 30 days	30.3	63.6	*33*	93.9	6.0	*33*	80.6	19.4	0.0	*31*

Note: In most cases, the percentage detail does not add to 100.0 because miscellaneous responses have been omitted from the table.
[a]Six persons (or 0.5 percent of the total sample) did not respond.
[b]One person (or 0.1 percent of the total sample) did not respond.
[c]Asked only of those favoring a limit on nonresident hunters.
[d]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

The percentages of respondents favoring limits were much higher in regions 4, 5, 6, and 7 (roughly the area east of the Continental Divide) than in regions 1, 2, and 3 in the west. Conversely, opposition to resident limits was much greater in the western portion of the state, where opponents outnumbered supporters almost two to one. There were significant differences between hunters and nonhunters. Persons who did not hunt in Montana in 1979 (nonhunters) were almost evenly split; about 41 percent were in favor of resident limits and about 44 percent opposed any limit. Hunters, on the other hand, were strongly against a limit on resident hunters; roughly 57 percent were opposed, while only about 29 percent were in favor of such limits.

Nonresident Hunters. A limit on the number of nonresident hunters, however, was overwhelmingly approved by the respondents. More than 86 percent said they favored such a limit, while only 10 percent were opposed. The only systematic variation among the respondents was between hunters and nonhunters; a slightly higher proportion of hunters (91 percent) favored such a limit than did nonhunters (84 percent).

Those respondents favoring a restriction on nonresident hunters were further queried about the current limit of 17,000 nonresident big game licenses that may be sold each year. Over half (56 percent) preferred a lower limit (thus fewer nonresident hunters), 32 percent favored no change in the limit, and only 1 percent wanted an increase in the limit. Once again, the only apparent variation among the respondents was between those who hunted in 1979 and those who did not; a lower limit on nonresident hunters was preferred by more hunters (63 percent) than nonhunters (about 52 percent).

Other Options to Increase Hunting Opportunities

Rather than limiting their number, an alternative which may improve the success rate for hunters is to increase the availability of hunting opportunities. Table 4.2 presents the responses to questions concerning other approaches to increasing the hunting (and fishing) opportunities in Montana.

Paid Hunting and Fishing on Private Land. One alternative dealt with the practice of paid hunting (and fishing) on private lands--members of the public would pay private landowners a fee to hunt (and fish) on their lands during the regular hunting (and fishing) seasons. When asked about such paid hunting (and fishing) on private land, which might open up some additional land for such recreation, the respondents were almost evenly divided; about 47 percent approved while about 44 percent disapproved. This alternative was less popular with hunters than nonhunters; about 34 percent of those who hunted in 1979 approved of paid hunting and fishing on private land, while 59 percent disapproved. Among nonhunters, the figures were almost reversed; about 54 percent approved while 35 percent disapproved.

The apparent ambivalence of Montanans toward the concept of paid hunting and fishing on private land disappears when the role of government is considered. Only 30 percent of the respondents believed that the state should encourage this practice, while 56 percent stated that the state should not encourage it. Encouragement by the state was viewed slightly more favorably by nonhunters than hunters; about 26 percent of the hunters thought the state should foster such paid arrangements as compared to only

Table 4.2

Opinions regarding Game Farms and Paid Hunting
and Fishing on Private Land
by Residence and Hunting Participation

(In Percentages)

	Paid Hunting and Fishing on Private Land			State Encouragement of Paid Hunting and Fishing on Private Land			Private Game Farms		
	Approve	Disapprove	*Number of Respondents*[a]	Favor	Oppose	*Number of Respondents*[b]	Favor	Oppose	*Number of Respondents*[b]
All respondents	46.6	43.7	*1,233*	30.3	56.0	*1,230*	37.9	49.3	*1,230*
Residence, by DFWP region									
Region 1	46.7	36.1	*122*	31.1	53.3	*122*	43.4	41.0	*122*
Region 2	49.1	41.0	*212*	28.6	56.7	*210*	39.2	45.5	*209*
Region 3	43.8	49.0	*194*	29.4	56.7	*194*	32.3	56.4	*195*
Region 4	46.1	44.0	*284*	31.4	55.8	*283*	37.5	48.4	*283*
Region 5	47.7	45.5	*220*	28.3	62.1	*219*	36.7	51.4	*218*
Region 6	47.1	40.4	*104*	35.6	50.0	*104*	42.3	50.0	*104*
Region 7	43.3	47.4	*97*	30.6	50.0	*98*	38.4	51.5	*99*
Residence, by county size[c]									
Seven largest counties	48.3	41.8	*715*	30.6	56.1	*713*	36.9	49.1	*713*
All other counties	44.2	46.3	*518*	30.0	55.9	*517*	39.3	49.7	*517*
Hunting participation in 1979									
Did not hunt in Montana	53.5	35.3	*797*	32.5	51.2	*795*	39.4	47.0	*795*
Did hunt in Montana	33.9	59.1	*436*	26.4	64.8	*435*	35.2	53.6	*435*
1 day	38.1	57.1	*21*	28.6	71.4	*21*	28.6	66.7	*21*
2- 5 days	40.7	54.0	*113*	31.0	56.6	*113*	35.4	54.0	*113*
6-10 days	34.8	58.9	*112*	24.3	68.5	*111*	38.7	45.9	*111*
11-30 days	27.4	62.4	*157*	23.6	66.9	*157*	32.5	56.7	*157*
Over 30 days	36.4	63.6	*33*	30.3	66.6	*33*	39.4	54.5	*33*

Note: The percentage detail does not add to 100.0 because miscellaneous responses have been omitted from the table.
[a]Four persons (or 0.3 percent of the total sample) did not respond.
[b]Seven persons (or 0.6 percent of the total sample) did not respond.
[c]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

32 percent of the nonhunters. Correspondingly, about 65 percent of the hunters and 51 percent of the nonhunters were against state encouragement of such a practice.

Private Game Farms. Another alternative is the private game farm, where game animals are grown for meat or other products and/or where people pay to hunt privately owned wildlife. This alternative received mixed reviews: about 49 percent of the respondents opposed this type of operation, but almost 38 percent (certainly a sizable proportion) approved. Opposition to private game farms was slightly greater among hunters (about 54 percent) than among nonhunters (47 percent). Regardless of their general feelings toward game farms, though, most repondents (71 percent) thought they should be regulated by the state. (These data are not presented in tabular format.)

Nongame Wildlife and Endangered Species

A few questions were also asked concerning nongame wildlife programs and programs for endangered species of wildlife. Tables 4.3 and 4.4 summarize the responses to these questions. Included in this section is a discussion of the responses to a question about small game animals, such as rabbits, squirrels, and raccoons. It is included in this section on nongame wildlife because, although such small animals may be hunted, they are not generally thought of by the public as being in the category of game animals.

Small Game Animals. At present, Montana does not require a license to hunt small game animals, such as rabbits, ground squirrels, and

Table 4.3

Opinions regarding Licensing and Funding of Nongame Wildlife Programs
by Residence and Hunting Participation

(In Percentages)

	Require License to Hunt Small Game			More Emphasis and Funding for Nongame Wildlife Programs			Use Hunting and Fishing Fees for Nongame Wildlife Programs		
	Favor	Oppose	*Number of Respondents*[a]	Favor	Oppose	*Number of Respondents*[b]	Favor	Oppose	*Number of Respondents*[b]
All respondents	25.9	68.4	*1,234*	17.4	72.5	*1,225*	46.4	40.8	*1,225*
Residence, by DFWP region									
Region 1	30.8	58.3	*120*	15.8	74.2	*120*	43.0	45.5	*121*
Region 2	24.5	70.3	*212*	16.6	68.2	*211*	47.6	38.5	*208*
Region 3	27.2	67.7	*195*	25.9	66.3	*193*	48.5	37.6	*194*
Region 4	25.3	68.8	*285*	17.8	73.3	*281*	44.0	43.3	*282*
Region 5	31.4	64.5	*220*	17.4	71.2	*219*	51.6	37.4	*219*
Region 6	16.5	79.6	*103*	9.6	81.7	*104*	44.2	43.3	*104*
Region 7	19.2	73.7	*99*	11.3	82.5	*97*	41.2	44.3	*97*
Residence, by county size[c]									
Seven largest counties	28.9	65.4	*716*	18.5	70.9	*712*	47.3	40.1	*711*
All other counties	21.6	72.6	*518*	15.8	74.7	*513*	45.1	41.8	*514*
Hunting participation in 1979									
Did not hunt in Montana	26.6	66.6	*800*	17.4	70.6	*793*	46.0	39.5	*793*
Did hunt in Montana	24.4	71.7	*434*	17.4	75.9	*432*	47.0	43.3	*432*
1 day	19.0	76.2	*21*	14.3	61.9	*21*	52.4	28.6	*21*
2- 5 days	17.0	77.7	*112*	16.2	74.8	*111*	43.8	45.5	*112*
6-10 days	24.1	23.2	*112*	16.2	78.4	*111*	44.5	47.3	*110*
11-30 days	32.1	64.1	*156*	17.2	78.3	*157*	50.6	40.4	*156*
Over 30 days	18.2	78.8	*33*	28.1	68.8	*32*	45.5	45.5	*33*

Note: The percentage detail does not add to 100.0 because miscellaneous responses have been omitted from the table.
[a]Three persons (or 0.2 percent of the total sample) did not respond.
[b]Twelve persons (or 1.0 percent of the total sample) did not respond.
[c]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

Table 4.4

Respondents Favoring Use of Hunting and Fishing License Fees to Protect Endangered Species, by Residence and Hunting Participation

	Percentage of Total	*Number of Respondents*
All respondents	31.0	*1,231*
Residence, by DFWP region		
Region 1	23.8	*122*
Region 2	31.4	*210*
Region 3	33.3	*195*
Region 4	28.5	*284*
Region 5	38.8	*219*
Region 6	28.8	*104*
Region 7	25.8	*97*
Residence, by county size[a]		
Seven largest counties	29.4	*714*
All other counties	33.1	*517*
Hunting participation in 1979		
Did not hunt in Montana	33.6	*797*
Did hunt in Montana	26.0	*434*
1 day	19.0	*21*
2- 5 days	25.0	*112*
6-10 days	26.1	*111*
11-30 days	28.0	*157*
Over 30 days	24.2	*33*

Notes: Only the affirmative responses are shown, as a percentage of all persons responding. Six persons (or 0.5 percent of the total sample) did not respond.
[a]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

raccoons. When queried, the respondents overwhelmingly thought that this practice should continue. About 68 percent opposed a licensing requirement, while approximately 26 percent thought that such hunters should be licensed (table 4.3). The opposition was greatest in the rural areas; about 73 percent of the respondents living in the forty-nine smaller counties were against requiring licenses, as compared to 65 percent in the seven largest. The rural versus urban difference is also present in the figures for the administrative regions; notice that the percentage opposed was greatest in the sparsely populated areas of regions 6 and 7, in the far eastern portion of Montana. Hunters were only slightly more opposed than nonhunters; about 72 percent of the hunters, compared to 67 percent of the nonhunters, said they were against a license requirement for hunting small game animals.

Nongame Wildlife. The respondents opposed any increased emphasis and funding of nongame wildlife by about four to one (table 4.3). About 72 percent said they were against such an increase, while only 17 percent were in favor. As with the small game licensing requirement, the opposition was slightly more prevalent in the rural areas; approximately 75 percent of the respondents in the forty-nine smaller counties were against increased emphasis and funding, compared to about 71 percent among those in the seven largest counties. Correspondingly, opposition was greatest in regions 6 and 7, which are primarily rural. Finally, even though about 17 percent of both hunters and nonhunters favored the change in emphasis, approximately 76 percent of the hunters were opposed as compared to about 71 percent of the nonhunters. Interestingly, of those in the entire sample who did

favor increased funding for nongame wildlife, a very large majority (about 89 percent) liked a procedure where people could donate part of their state tax refund by checking a box on their tax form.

When asked about the use of hunting and fishing fees for nongame wildlife programs, the respondents were about evenly split; 46 percent were in favor while about 41 percent were opposed. There were no significant differences among the respondents in their opinions concerning this use of hunting and fishing fees; even hunters and nonhunters had similar patterns of response.

Endangered Species. Another issue related to nongame funding dealt with the use of hunting and fishing license fees for programs or efforts to protect endangered species in the state. Only about 31 percent of the respondents favored the use of license fees to finance the protection of endangered animals (table 4.4). The remainder mentioned other sources, such as state taxes or federal funds. There was more of a tendency for nonhunters to favor this proposal than hunters; about 34 percent of the nonhunters approved of this use of license fees as compared to 26 percent of those who hunted during 1979.

Land Acquisition for Wildlife Management

When the state purchases land for wildlife management purposes, hunting is often allowed but most other uses are excluded or seriously limited. When asked whether they felt the state should continue to acquire land for such purposes, about 53 percent of the respondents were in favor and approximately 34 percent were opposed (table 4.5). There

Table 4.5

Opinions regarding Continued State Purchases of Land
for Wildlife Management Purchases Only
by Residence and Hunting Participation

(In Percentages)

	Favor	Oppose	*Number of Respondents*
All respondents	52.8	34.1	*1,219*
Residence, by DFWP region			
Region 1	53.7	32.3	*121*
Region 2	53.4	31.7	*208*
Region 3	49.5	38.7	*194*
Region 4	55.7	32.1	*280*
Region 5	54.7	34.6	*214*
Region 6	51.5	34.0	*103*
Region 7	46.5	37.4	*99*
Residence, by county size[a]			
Seven largest counties	55.3	32.5	*707*
All other counties	49.4	36.3	*512*
Hunting participation in 1979			
Did not hunt in Montana	48.6	36.6	*784*
Did hunt in Montana	60.5	29.7	*435*
1 day	61.9	23.8	*21*
2- 5 days	51.3	36.3	*113*
6-10 days	61.6	31.3	*112*
11-30 days	64.7	25.0	*156*
Over 30 days	66.7	27.3	*33*

Notes: The percentage detail does not add to 100.0 because miscellaneous responses have been omitted from the table. Eighteen persons (or 1.5 percent of the total sample) did not respond.
[a]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

were sizable differences between the responses of hunters and nonhunters. About 49 percent of the nonhunters felt that these purchases should continue. In contrast, approximately 60 percent of the hunters favored these purchases, and approval was highest among those who hunted most. Notice, for example, that the approval rate was more than 66 percent for persons who hunted over thirty days in 1979.

Funding Hunting and Wildlife Management Programs

The costs of Montana's hunting and wildlife management programs are likely to rise significantly in the next few years. The respondents were asked their opinions about proposed hunting license fee increases to finance these increased costs. Their responses are presented in table 4.6. A large majority of the respondents (about 69 percent) favored increased hunting license fees to cover the rise in costs, and about 13 percent said they did not know or felt unable to give an opinion; another 18 percent suggested other funding sources, such as tax revenues in general or federal funds. Not surprisingly, increased license fees were less popular among hunters than nonhunters; about 64 percent of the hunters agreed with increased fees, compared to 71 percent of the nonhunters. Also, increased license fees were less popular among respondents with lower household incomes; about 83 percent of those with household incomes over $35,000 in 1979 favored higher fees, and the proportion in favor declined steadily to about 61 percent among those with household incomes of $5,000 or less. Interestingly, in terms of household income, many of the differences in the proportions of respondents favoring higher fees were accompanied by corresponding differences in the proportions who said they

Table 4.6

Opinions regarding Selected Hunting License Fee Increases
by Residence, Hunting Participation, and Income

(In Percentages)

	How to Fund Rising Costs of Wildlife Program			Specific License Fee Increases Preferred by Those Favoring Increased Fees				Increase Resident Fees to Make Up Revenue Lost from Fewer Nonresident Licenses		
	Increase Hunting Fees	Don't Know	*Number of Respondents*[a]	Resident Only	Nonresident Only	Both	*Number of Respondents*[b]	Favor	Oppose	*Number of Respondents*[c]
All respondents	68.8	12.8	*1,229*	2.9	35.4	60.1	*887*	62.3	30.5	*594*
Residence, by OFWP region										
Region 1	65.3	15.7	*121*	2.3	51.7	44.8	*87*	64.5	21.0	*62*
Region 2	67.8	14.7	*211*	2.7	35.3	61.3	*150*	62.0	33.7	*92*
Region 3	69.1	10.8	*194*	2.1	41.1	54.6	*141*	58.9	36.8	*95*
Region 4	66.7	14.2	*282*	5.1	29.2	65.1	*195*	60.4	29.1	*134*
Region 5	74.9	8.2	*219*	2.4	34.3	62.1	*169*	64.2	30.1	*123*
Region 6	74.0	10.6	*104*	0.0	28.8	66.3	*80*	68.2	25.0	*44*
Region 7	61.2	17.3	*98*	4.6	30.8	61.5	*65*	61.4	34.1	*44*
Residence, by county size[d]										
Seven largest counties	68.5	11.1	*712*	2.5	36.3	60.0	*513*	63.6	29.4	*357*
All other counties	69.1	15.1	*517*	3.5	34.2	60.2	*374*	60.3	32.1	*237*
Hunting participation in 1979										
Did not hunt in Montana	71.3	14.1	*794*	2.9	33.2	62.2	*587*	63.5	27.5	*345*
Did hunt in Montana	64.1	10.3	*435*	3.0	39.7	56.0	*300*	60.6	34.5	*249*
1 day	47.6	28.6	*21*	0.0	27.3	72.7	*11*	46.2	30.8	*13*
2- 5 days	65.2	9.8	*112*	2.6	43.6	52.6	*78*	55.2	43.1	*58*
6-10 days	67.0	9.8	*112*	2.5	35.0	61.3	*80*	58.3	38.3	*60*
11-30 days	65.0	8.9	*157*	1.8	40.0	56.4	*110*	69.1	24.5	*94*
Over 30 days	57.6	9.1	*33*	14.2	47.6	38.1	*21*	54.2	45.8	*24*
Household income in 1979[e]										
$ 5,000 or less	60.7	22.6	*84*	3.6	50.9	43.6	*55*	61.7	31.9	*47*
$ 5,000 - $10,000	66.2	17.2	*151*	1.9	37.5	59.6	*104*	59.7	32.8	*67*
$10,001 - $15,000	65.8	13.6	*199*	2.9	31.7	64.0	*139*	62.2	30.6	*111*
$15,001 - $20,000	68.0	12.3	*219*	4.5	28.8	64.7	*156*	59.6	33.3	*114*
$20,001 - $35,000	70.6	10.0	*350*	2.7	39.2	56.5	*260*	63.8	31.3	*160*
Over $35,000	83.2	3.6	*137*	1.7	28.3	68.3	*120*	76.8	16.1	*56*

Note: In most cases, the percentage detail does not add to 100.0 because the miscellaneous responses were omitted from the table.

[a] Eight persons (or 0.6 percent of the total sample) did not respond.

[b] Asked only of those who did not oppose increasing hunting license fees to cover rising wildlife program costs.

[c] Asked only of those who wanted to reduce the number of nonresident hunting licenses allowed.

[d] The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

[e] The number of respondents does not add to the total shown for all respondents because those who did not respond to the income question were omitted from the crosstabulation.

either didn't know or could not give an opinion. For example, the rise in the favorable response rate among persons in the upper income categories was matched by decreases in the proportion who didn't know or had no opinion. This suggests that as persons become more familiar with the situation, they tend to favor increased license fees rather than other funding sources.

Most of the respondents who favored higher fees thought that both resident and nonresident licenses should be increased (60 percent), but a sizable minority (35 percent) felt that only nonresident licenses should be raised. Less than 3 percent responded that only resident hunters should pay higher license fees. A slightly greater percentage of hunters than nonhunters thought that only nonresident licenses should be increased; about 40 percent of the hunters said that only nonresident fees should be raised, compared to 33 percent of the nonhunters. Correspondingly, proportionately fewer hunters (56 percent) than nonhunters (62 percent) believed that both resident and nonresident license fees should be raised.

Earlier it was noted that many of the respondents felt that the current limit of 17,000 nonresident big game hunting licenses issued each year should be reduced. Such an action may decrease the revenue to the Department of Fish, Wildlife, and Parks. The respondents who said that this nonresident limit should be reduced were further questioned about an increase in resident hunting fees to make up for the lost revenue. Given this set of circumstances -- a decline in revenue due to fewer nonresident hunters -- these respondents believed in higher resident hunting fees by more than a two to one margin; 62 percent were in favor while about 30 percent were opposed.

CHAPTER 5

RELATED ISSUES PERTAINING IN GENERAL TO OUTDOOR RECREATION AND THE MONTANA DEPARTMENT OF FISH, WILDLIFE, AND PARKS

A number of other issues were also addressed in the survey and are discussed in this section. These issues relate to all aspects of outdoor recreation -- not just to the parks and recreation site program, fisheries program, or hunting and wildlife programs -- and to the Department overall.

Relations between Landowners and Recreationists

The potential for conflict between recreationists and landowners is one of the most important problems in resource management. The respondents were asked questions designed to gauge the extent of the problem and also to examine the issues from the perspective of both the landowner and the recreationist.

The respondents were first asked whether they believed there was any friction between private landowners and people who used their land for recreation activities (recreationists). No less than 90 percent of the respondents agreed that there were conflicts between these two groups. (These data are not presented in tabular form.)

Those who agreed that there was friction between landowners and recreationists were further queried about the severity of the problem. As shown in table 5.1, about 26 percent said it was "very serious," approximately 52 percent said it was "serious," and about 17 percent said

Table 5.1

Landowner-Recreationist Friction and Related Experience of Recreationists
by Residence and Fishing and Hunting Participation

(In Percentages)

	Friction between Landowners and Recreationists[a]				Respondents Who Have Experienced Problems with Landowners[b]		Frequency of Problems with Landowners[c]			
	Very Serious	Serious	Not Too Serious	*Number of Respondents*	Percentage of Total	*Number of Respondents*	Very Often	Sometimes	Not Too Frequently	*Number of Respondents*
All respondents	25.7	51.8	16.8	*1,109*	24.2	*1,234*	24.1	26.7	47.5	*303*
Residence, by DFWP region										
Region 1	28.0	45.8	17.8	*107*	23.0	*122*	----[d]	----[d]	----[d]	*25*
Region 2	16.2	59.2	17.8	*191*	18.1	*210*	----[d]	----[d]	----[d]	*39*
Region 3	31.6	48.6	13.6	*177*	29.7	*195*	----[d]	----[d]	----[d]	*59*
Region 4	28.4	51.8	13.2	*257*	26.1	*284*	----[d]	----[d]	----[d]	*75*
Region 5	29.3	51.0	16.2	*198*	25.9	*220*	----[d]	----[d]	----[d]	*58*
Region 6	18.2	51.0	26.1	*88*	23.1	*104*	----[d]	----[d]	----[d]	*24*
Region 7	23.1	52.7	22.0	*91*	20.2	*99*	----[d]	----[d]	----[d]	*20*
Residence, by county size[e]										
Seven largest counties	26.4	52.7	14.8	*655*	26.2	*715*	21.5	28.8	47.6	*191*
All other counties	24.7	50.7	19.6	*454*	21.6	*519*	28.6	23.2	47.3	*112*
Fishing participation in 1979										
Did not fish in Montana	23.1	49.7	18.8	*441*	14.4	*507*	23.0	24.3	50.0	*74*
Did fish in Montana	27.4	53.3	15.4	*668*	31.1	*727*	24.4[d]	27.5[d]	46.7[d]	*229*
1-10 days	28.2	48.4	17.9	*308*	26.5	*328*	----[d]	----[d]	----[d]	*89*
Over 10 days	26.6	57.5	13.3	*360*	34.8	*399*	----[d]	----[d]	----[d]	*140*
Hunting participation in 1979										
Did not hunt in Montana	23.2	50.8	18.6	*708*	16.0	*798*	25.2	26.0	45.8	*131*
Did hunt in Montana	30.1	53.6	13.5	*401*	39.2	*436*	23.2[d]	27.3[d]	48.8[d]	*172*
1-10 days	30.3	53.1	13.8	*224*	36.6	*246*	----[d]	----[d]	----[d]	*30*
Over 10 days	29.9	54.2	13.0	*177*	42.6	*190*	----[d]	----[d]	----[d]	*82*

[a]Asked only of those who felt there was landowner-recreationist friction (90 percent of the total sample of 1,237). Percentage detail does not add to 100.0 because the miscellaneous responses have been omitted from the table.
[b]Only the affirmative responses have been shown, as a percentage of all persons responding. Three persons (or 0.2 percent of the total sample) did not respond.
[c]Asked only of those who reported having experienced friction with a landowner (approximately 24 percent of the total sample of 1,237). Percentage detail does not add to 100.0 because the miscellaneous responses were omitted from the table. Also, although some detail is provided for selected respondent groups for comparison purposes only, the numbers are too small to allow for reliable analysis.
[d]The number of responses is too small to allow for reliable analysis.
[e]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

"not too serious." The response patterns were roughly similar in all portions of the state, except that persons in regions 2 (west central) and region 6 (northeast) tended to downgrade the severity of the problem; a slightly smaller percentage of the respondents in these areas rated it as "very serious." Both hunting and fishing enthusiasts thought the problem was more serious than did persons who did not participate in these activities. Notice, for example, that there were relatively more fishermen than nonfishermen who ranked landowner-recreationist friction as "serious" or "very serious." A similar pattern is also present in the responses of hunters and nonhunters -- that is, a relatively higher percentage of hunters thought the problem was "serious" or "very serious."

The Recreationist Perspective. The respondents were asked if they had ever experienced a problem or friction with a private landowner about access to hunting, fishing, or recreation sites. About 24 percent replied that they had experienced a problem with a landowner (table 5.1). Urban dwellers appeared to be more likely than persons living in rural areas to have experienced conflict with a landowner; about 26 percent of the persons living in the seven largest counties reported such conflict, compared to about 22 percent among those in the remaining forty-nine counties. Not unexpectedly, hunting and fishing enthusiasts were much more likely to have reported friction with landowners than were persons who did not engage in these forms of recreation. About 31 percent of the fishing enthusiasts and 39 percent of the hunters said they experienced problems with landowners, compared to only 14 percent among nonfishermen and 16 percent among nonhunters. Not surprising, avid outdoor recreationists

appeared to be most likely to experience landowner friction. Respondents who fished over ten days reported a higher incidence of landowner conflict (about 35 percent) than did those who fished ten days or less (26 percent). Similarly, a slightly higher percentage of persons who hunted over ten days said they had problems than did those hunting ten days or less. Finally, it is interesting to note that relatively more hunters (39 percent) than fishing enthusiasts (31 percent) reported that they had experienced a problem with a landowner.

The respondents who experienced friction with landowners were queried further about the frequency of this problem. Twenty-four percent said it occurred "very often," approximately 27 percent said "sometimes," and about 48 percent said "not too frequently." The details for the administrative regions are not shown because there were too few responses in these categories for reliable analysis.

The Landowner Perspective. In order to analyze both sides of the problem, the landowners in the sample were asked about their experiences with recreationists. As shown in table 5.2, 23 percent of the respondents said that they (or, in a couple of cases, another family member) had land that is or could be used for hunting, fishing, or other recreation. More than one-half (54 percent) of these landowners said that they had encountered friction or problems with recreationists regarding access to or through their land. Moreover, the landowners in the eastern part of the state appeared to have had proportionately more problems than have those in western Montana. Over 64 percent of the landowners in region 6 (northeast) and about 66 percent in region 7 (southeast) reported problems,

Table 5.2

Land Ownership and Landowner Friction
with Recreationists, by Residence

	Respondents Who Own Recreational Land[a]		Landowners Who Have Experienced Problems with Recreationists	
	Percentage of Total	*Number of Respondents*	Percentage of Total	*Number of Respondents*[b]
All respondents	23.0	*1,237*	54.4	*285*
Residence, by DFWP region				
Region 1	36.1	*122*	47.7	*44*
Region 2	20.8	*212*	45.5	*44*
Region 3	20.5	*195*	52.5	*40*
Region 4	20.0	*285*	61.4	*57*
Region 5	18.2	*220*	47.5	*40*
Region 6	29.8	*104*	64.5	*31*
Region 7	29.3	*99*	65.5	*29*
Residence, by county size[c]				
Seven largest counties	18.1	*717*	49.2	*130*
All other counties	29.8	*520*	58.7	*155*

Note: Only the affirmative responses are shown, as a percentage of all persons responding.
[a]Includes two persons who said another family member (usually the parent) in the household actually owns the land.
[b]Asked only of landowners.
[c]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

compared to about 48 percent in region 1 (northwest) and 46 percent in region 2 (west central). (Even though the number of responses is relatively small, this difference between the eastern and western regions is statistically significant.)

When asked about the frequency of problems with recreationists, 32 percent of the landowners said they occurred "very often," about 35 percent said "sometimes," and about 29 percent said "not too frequently." Unfortunately, there were too few responses to analyze accurately the frequency of problems for the various categories of respondents, thus the responses have not been presented in tabular format.

Efforts to Improve Landowner-Recreationist Relations. As a possible approach to reducing the friction between landowners and recreationists, whether perceived or actual, the state could negotiate specific easements across private land and/or other arrangements for allowing access for recreationists. Table 5.3 summarizes the respondents' opinions concerning some of these possible alternatives.

A state program to negotiate long-term easements across private lands in order to reach public lands received the overwhelming support of the respondents; more than 75 percent favored such a program. Negotiation of easements was more popular among hunting and fishing enthusiasts. About 81 percent of the persons who fished in 1979 favored the program, compared to 67 percent among those who did not fish. Similarly, approximately 84 percent of the hunters approved of easements, compared to 70 percent of the nonhunters. Notice that avid recreationists were more inclined to favor an easement program; the approval rate was higher

Table 5.3

Opinions regarding Selected State Actions to Facilitate Access to Public Lands and Wildlife by Residence, Fishing and Hunting Participation, and Landowner Status

(In Percentages)

	Negotiate Easements (across Private Lands) for Public Land Access			Easements vs. Other Land Programs			Financial Incentive to Landowners for Maintaining Wildlife Habitat and Allowing Public Access		
	Favor	Oppose	*Number of Respondents*[a]	In Addition to Other	Instead of Other	*Number of Respondents*[b]	Approve	Disapprove	*Number of Respondents*[c]
All respondents	75.2	14.2	*1,232*	54.6	22.6	*1,216*	61.2	32.6	*1,228*
Residence, by DFWP region									
Region 1	75.4	16.4	*122*	57.4	20.5	*122*	66.1	27.3	*121*
Region 2	74.1	14.6	*212*	53.8	20.2	*208*	58.6	32.4	*210*
Region 3	73.7	17.5	*194*	57.0	21.2	*193*	62.2	32.6	*193*
Region 4	73.9	14.8	*283*	51.1	25.4	*276*	59.2	35.5	*282*
Region 5	79.5	10.5	*219*	59.4	20.7	*217*	64.8	28.8	*219*
Region 6	75.0	11.5	*104*	53.8	24.0	*104*	62.5	31.7	*104*
Region 7	75.5	13.3	*98*	47.9	28.1	*96*	55.6	35.4	*99*
Residence, by county size[d]									
Seven largest counties	75.8	13.9	*714*	56.8	21.8	*706*	60.1	32.4	*709*
All other counties	74.5	14.7	*518*	51.6	23.7	*510*	62.8	31.8	*519*
Fishing participation in 1979									
Did not fish in Montana	67.1	18.4	*505*	46.2	23.3	*493*	57.2	33.9	*505*
Did fish in Montana	80.9	11.3	*727*	60.3	22.1	*723*	64.0	31.0	*723*
1-10 days	78.3	11.0	*327*	55.1	25.2	*325*	59.9	33.3	*327*
Over 10 days	83.0	11.5	*400*	64.5	19.6	*398*	67.4	29.0	*396*
Hunting participation in 1979									
Did not hunt in Montana	70.5	16.1	*796*	50.5	22.5	*792*	59.7	32.2	*795*
Did hunt in Montana	83.9	10.8	*436*	62.0	22.8	*434*	63.9	32.1	*433*
1-10 days	81.7	13.0	*246*	60.7	23.4	*244*	62.0	33.9	*245*
Over 10 days	86.8	7.9	*190*	63.7	22.1	*190*	66.5	29.8	*188*
Landowner status									
Landowner	71.1	20.4	*284*	50.9	30.3	*277*	62.5	32.3	*285*
Nonowner	76.5	12.3	*948*	55.7	20.3	*939*	60.9	32.1	*943*

Note: The percentage detail does not add to 100.0 because miscellaneous responses have been omitted from the table.

[a]Five persons (or 0.4 percent of the total sample) did not respond.

[b]Twenty-one persons (or 1.7 percent of the total sample) did not respond.

[c]Nine persons (or 0.7 percent of the total sample) did not respond.

[d]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

for hunting and fishing enthusiasts who were in the field over ten days than for those with ten days or less.

Since, under this proposal, the state would be negotiating such easements with private landowners, it seemed appropriate to look at how the landowners felt about the proposal and apparently their opinions did not differ significantly. While landowners were more likely than any other group to voice some opposition, the easement proposal was still supported by the majority (71 percent).

Montana already has a number of programs to acquire land for fish, wildlife, and recreation. The respondents were asked if such an easement program should be in addition to or instead of some of the current programs. Once again, the easement program was popular with the respondents; more than one-half (55 percent) said that it should be in addition to other land programs, while less than one-fourth (about 23 percent) preferred that it replace an existing program. Support for the additional easement program was greatest among recreationists; 60 percent of the fishing enthusiasts and 62 percent of the hunters said it should be in addition to other land programs, compared to roughly 46 to 51 percent among persons who did not participate in these activities in 1979. Repeating the earlier patterns, an additional easement program was most popular with avid fishermen and, to a lesser degree, with avid hunters (over ten days of participation). Among landowners, an additional program was also much more popular (about 51 percent) than was a replacement program (30 percent). When compared with other respondent groups, though, landowners were relatively less enthusiastic about an additional program and were somewhat more likely to opt for a replacement program.

The respondents favoring a new easement program were subsequently asked how it should be financed. Over half (58 percent) said that such a program should be paid for through increased hunting and fishing fees paid by the actual users. The remaining respondents either said they didn't know or mentioned some other funding source. (These data are not presented in tabular form.)

Another alternative for improving relations with private landowners would be to provide them with a financial incentive for maintaining wildlife habitat and allowing public access. Such a proposal received support from the respondents; 61 percent approved the proposal, while about one-third disapproved. A program of financial incentives was particularly popular among recreationists; the approval rate was about 64 percent among fishing enthusiasts, compared to 57 percent among persons who did not fish in 1979. Among hunters and nonhunters, about 64 percent and 60 percent, respectively, approved the proposal. The support for this proposal was greatest among avid recreationists; the percentage approving was greater for persons with over ten days of hunting or fishing than it was for persons with ten days or less. The proposal was also popular among landowners (about 62 percent in favor); and, in this instance, landowners were <u>not</u> more likely than any others to register opposition.

When it came to funding such financial incentives for landowners, slightly more than one-half (about 53 percent) of those favoring such a program said that fishing and hunting fees should be raised to cover the costs. The other respondents either said they didn't know or mentioned

other possibilities, such as special taxes, federal funds, or some other source. (These data are not presented in tabular form.)

Water Use and Energy Decision Issues

Table 5.4 summarizes the opinions of the respondents concerning the priorities for using Montana waters and the role of the Department of Fish, Wildlife, and Parks in decisions made by the state concerning energy-related activities. On the subject of priority of use for Montana waters, the respondents were offered three alternatives: (1) water should be maintained for fish and wildlife before anything else is considered; (2) it should be maintained for fish, wildlife, and agriculture before anything else; and (3) Montana water should be equally available for all uses, including industrial. Only 8 percent of the respondents felt that fish and wildlife should have the highest priority. Instead, approximately 42 percent said that agriculture should also receive first priority along with fish and wildlife, and about 37 percent replied that the water should be equally available for all users, including industrial. For most, though not all, respondent groups the "ranking" of these three alternatives was relatively similar: in most cases, the larger percentage of the respondents in the particular group gave first priority to fish and widlife and agriculture before anything else, followed (often closely) by the alternative of equal availability of water to all users. Two notable but not significant exceptions were in regions 1 (northwest) and 4 (north central) in which the largest percentages of respondents cited the "equal availability" alternative. Consistently few respondents gave first priority to the alternative of fish and wildlife before anything else.

Table 5.4

Preferences regarding Water Use and Departmental Involvement in State Energy Decisions
by Residence and Fishing and Hunting Participation

(In Percentages)

	Priority for Use of Montana Water				DFWP Involvement in State Energy-Related Decisions		
	Fish-Wildlife First	Fish-Wildlife and Agriculture First	Equally Available for All Uses Including Industrial	*Number of Respondents*[a]	Should Be Involved	Should Not Be Involved	*Number of Respondents*[b]
All respondents	8.2	41.6	36.6	*1,227*	83.1	11.2	*1,234*
Residence, by DFWP region							
Region 1	7.5	33.3	42.5	*120*	83.6	12.3	*122*
Region 2	10.8	39.2	36.8	*212*	78.7	12.3	*211*
Region 3	11.3	46.9	28.4	*194*	87.1	7.2	*194*
Region 4	6.8	34.1	46.2	*279*	84.9	11.3	*284*
Region 5	5.5	51.4	28.6	*220*	84.1	11.8	*220*
Region 6	4.9	41.7	37.9	*103*	77.9	12.5	*104*
Region 7	11.1	45.5	34.3	*99*	82.8	12.1	*99*
Residence, by county size[c]							
Seven largest counties	7.7	41.1	38.3	*711*	85.4	9.2	*714*
All other counties	8.9	42.2	34.3	*516*	80.0	13.8	*520*
Fishing participation in 1979							
Did not fish in Montana	5.2	39.9	38.9	*501*	78.5	13.2	*508*
Did fish in Montana	10.3	42.7	35.0	*726*	86.3	9.8	*726*
Hunting participation in 1979							
Did not hunt in Montana	6.9	40.1	39.2	*794*	81.6	11.0	*800*
Did hunt in Montana	10.6	44.3	31.9	*433*	85.9	11.5	*434*

Note: The percentage detail does not add to 100.0 because the miscellaneous responses have been omitted from the table.
[a]Ten persons (or 0.8 percent of the total sample) did not respond.
[b]Three persons (or 0.2 percent of the total sample) did not respond.
[c]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

Not surprisingly, this alternative (fish and wildlife first) was more popular among the fishing and hunting enthusiasts than among persons who did not participate in these activities. Also, it is interesting to note that an equal availability policy for Montana water received considerable support (about 32 and 35 percent, respectively) even among hunters and fishing enthusiasts.

Energy-related developments, such as coal mining and oil and gas exploration, could affect fish and wildlife habitat in some areas of the state. The respondents were asked whether the Department of Fish, Wildlife, and Parks should be involved in the state's decisions concerning energy-related activities in order to assure consideration of fish and wildlife habitat. They overwhelmingly stated that the Department should participate in energy-related decisions; 83 percent of the respondents agreed with such involvement, while only 11 percent were opposed. Department involvement received relatively more support from hunters and fishing enthusiasts than from nonparticipants in these activities. The only significant opposition appeared to be in rural areas; about 14 percent of the persons living in the forty-nine smaller counties were opposed to such involvement by the Department, as compared to 9 percent for the seven largest counties.

Enforcement of Fish, Game, and Park Regulations

Among the Department's responsibilities is enforcement of the many fish, game, and park regulations, and several aspects of enforcement were covered in the survey.

Current Enforcement Program. When the respondents were asked about the current level of enforcement activity, overall, the majority of the respondents (61 percent) said that the Department provides adequate enforcement at present, while 25 percent felt that the enforcement efforts should be increased (table 5.5). Barely 3 percent thought the Department was doing more than was warranted, and the remainder either didn't know or offered some other response. Increased enforcement effort received the most support among hunting and fishing enthusiasts. About 28 percent of the fishing enthusiasts thought that overall enforcement should be increased, compared to about 21 percent of those who did not fish in 1979. Similarly, about 28 percent of the hunters supported increased enforcement effort, compared to roughly 24 percent of the nonhunters. It is interesting to note that the more avid recreationists were more likely to prefer increased enforcement; for example, about 36 percent of the hunters who were in the field over ten days said they thought the overall enforcement effort should be increased, compared to roughly 22 percent of those who hunted ten days or less.

The respondents were almost evenly divided in their opinions concerning the number of enforcement personnel in the field; approximately 38 percent of the respondents felt that more enforcement personnel are needed, while 43 percent replied that there were currently enough. As with the overall level of enforcement, support for additional enforcement personnel was relatively greater among hunters and fishing enthusiasts, especially the more avid participants. For example, 42 percent of the hunters favored more enforcement personnel, compared with 35 percent of

Table 5.5

Opinions regarding Departmental Enforcement Efforts and Funding
by Residence and Fishing and Hunting Participation

(In Percentages)

	Overall DFWP Enforcement Effort			Number of DFWP Field Enforcement Personnel			Increase License Fees to Cover Additional Enforcement Costs		
	Should Be Increased	Adequate Now	*Number of Respondents*[a]	Enough Now	More Are Needed	*Number of Respondents*[b]	Favor	Oppose	*Number of Respondents*[a]
All respondents	25.0	61.1	*1,228*	43.4	37.7	*1,227*	57.1	34.4	*1,228*
Residence, by DFWP region									
Region 1	29.4	59.7	*119*	42.1	36.4	*121*	50.8	37.5	*120*
Region 2	25.0	59.0	*212*	47.4	33.5	*209*	57.1	31.9	*210*
Region 3	23.3	61.7	*193*	40.9	39.9	*193*	54.1	41.2	*194*
Region 4	25.4	60.4	*283*	39.1	39.4	*284*	57.0	35.2	*284*
Region 5	22.8	62.6	*219*	48.4	35.9	*217*	63.3	29.8	*218*
Region 6	24.0	63.5	*104*	40.4	41.3	*104*	59.2	30.1	*103*
Region 7	27.6	62.2	*98*	46.5	38.4	*99*	54.5	35.4	*99*
Residence, by county size[c]									
Seven largest counties	25.3	60.3	*712*	43.0	38.1	*709*	57.9	34.5	*711*
All other counties	24.6	62.2	*516*	44.0	37.1	*518*	55.9	34.4	*517*
Fishing participation in 1979									
Did not fish in Montana	20.9	58.8	*502*	41.9	31.2	*503*	61.3	27.8	*504*
Did fish in Montana	27.8	62.6	*726*	44.5	42.1	*724*	54.1	39.1	*724*
1-10 days	26.9	60.4	*326*	44.4	39.8	*324*	52.0	39.4	*325*
Over 10 days	28.5	64.5	*400*	44.5	44.0	*400*	55.9	38.8	*399*
Hunting participation in 1979									
Did not hunt in Montana	23.5	60.0	*793*	43.6	35.1	*793*	60.6	29.7	*795*
Did hunt in Montana	27.8	63.0	*435*	43.1	42.4	*434*	50.6	43.2	*433*
1-10 days	21.6	67.3	*245*	46.3	37.7	*244*	45.9	47.1	*244*
Over 10 days	35.8	57.4	*190*	38.9	48.4	*190*	56.6	38.1	*189*

Note: The percentage detail does not add to 100.0 because the major responses only are shown (miscellaneous responses and those with very few responses have been omitted from the table).

[a]Nine persons (or 0.7 percent of the total sample) did not respond.

[b]Ten persons (or 0.8 percent of the total sample) did not respond.

[c]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

the nonhunters. Among those who hunted over ten days, 48 percent said more personnel are needed, compared to about 38 percent among those who hunted less.

Funding for Increased Enforcement. Funding, of course, is always a concern, and respondents were asked how they would feel about an increase in license fees to cover any expansion in the enforcement program. Fifty-seven percent said they favored an increase in license fees for such additional costs, while 34 percent were opposed (table 5.5). Resistance to increased license fees for this purpose was greatest among hunting and fishing enthusiasts, but not necessarily among the more avid participants. Notice, for example, that about 51 percent of the hunters overall favored increased fees and 43 percent were opposed; among nonhunters, in contrast, about 61 percent favored the increase and only about 30 percent were opposed. However, there were significant differences among the hunters themselves. In fact, the more avid hunters generally favored higher fees for this purpose: about 57 percent of those hunting over ten days said they supported higher licenses, compared to only 46 percent among the less active hunters.

Alternatives to Increased Enforcement Personnel

Rather than hiring more enforcement personnel, the Department could expand its enforcement effort using other approaches. For example, it could provide more public information about the regulations in general; or it might put more emphasis on the penalties for violating the regulations; or, finally, it could encourage the public to report any

violations they see. When queried about these particular alternatives, the respondents clearly preferred that more emphasis be placed on the reporting of violations by the public. Forty-one percent preferred this approach, while about 23 percent favored more public information about the regulations, and 18 percent preferred more emphasis on the penalties for violations (table 5.6). Increased public involvement in the reporting of violations received the support of the enthusiasts; 50 percent of the hunters and 44 percent of the fishing enthusiasts preferred this alternative, compared to roughly 37 percent of both nonhunters and nonfishermen.

Ex-Officio Enforcement Activity. As another approach to enforcement, the Department's field personnel, other than game wardens, were recently trained and given authority to enforce fish, game, and park regulations. The respondents clearly approved of this approach. As shown in table 5.6, over 75 percent of the respondents favored this expansion of duties and authority for field personnel, while only 13 percent were opposed. This approach was slightly more popular among hunting and fishing enthusiasts than among those who did not participate in these activities. For example, 80 percent of the fishermen were in favor, compared to about 77 percent of those who did not fish.

The respondents were slightly less enthusiastic toward giving similar enforcement authority to other people (outside the Department), such as field personnel in other state or federal agencies. Those who approved of ex-officio enforcement authority for Department personnel were asked about expanding this authority to similar personnel in other agencies: about 65 percent were in favor, but 30 percent (clearly a sizable minority) were opposed.

Table 5.6

Preferences regarding Selected Enforcement Activities
by Residence and Fishing and Hunting Participation

(In Percentages)

	Alternative Enforcement Programs[a]				Use of DFWP Field Personnel for Ex-Officio Enforcement			Give Ex-Officio Enforcement Authority to Similar Other Field Personnel		
	More Information	Emphasize Penalties	Public Reporting	*Number of Respondents*[b]	Favor	Oppose	*Number of Respondents*[c]	Favor	Oppose	*Number of Respondents*[d]
All respondents	22.7	18.5	41.4	*1,228*	78.7	13.4	*1,221*	64.7	30.1	*973*
Residence, by DFWP region										
Region 1	15.6	18.0	39.3	*122*	73.6	12.4	*121*	66.3	31.5	*92*
Region 2	26.1	12.3	42.2	*211*	79.1	11.8	*211*	64.9	25.3	*174*
Region 3	23.8	18.7	42.0	*193*	77.5	14.7	*191*	64.2	30.4	*148*
Region 4	22.0	20.2	44.7	*282*	82.9	11.0	*281*	65.2	30.9	*233*
Region 5	27.3	18.6	36.8	*220*	77.2	17.2	*215*	65.9	31.1	*167*
Region 6	18.4	24.3	40.8	*103*	80.6	10.7	*103*	59.0	36.1	*83*
Region 7	18.6	20.6	43.3	*97*	75.8	17.2	*99*	65.8	27.6	*76*
Residence, by county size[e]										
Seven largest counties	24.7	17.2	41.0	*715*	78.8	14.0	*706*	65.7	28.8	*562*
All other counties	19.7	20.3	42.1	*513*	78.6	12.6	*515*	63.5	31.9	*411*
Fishing participation in 1979										
Did not fish in Montana	22.7	20.7	37.3	*502*	76.6	12.6	*499*	63.8	29.8	*389*
Did fish in Montana	22.7	16.9	44.3	*726*	80.2	14.0	*722*	66.4	30.3	*584*
Hunting participation in 1979										
Did not hunt in Montana	25.3	20.2	36.8	*794*	77.5	12.7	*787*	63.6	30.3	*623*
Did hunt in Montana	18.0	15.4	50.0	*434*	80.9	14.8	*434*	66.9	29.7	*350*

Note: Percentage detail does not add to 100.0 because miscellaneous responses have been omitted from the table.

[a]Alternative enforcement programs: more public information about the regulations in general; emphasizing the penalties for breaking the regulations; and encouraging the public to report any violations they see.

[b]Nine persons (or 0.7 percent of the total sample) did not respond.

[c]Sixteen persons (or 1.3 percent of the total sample) did not respond.

[d]Asked only of those who did not oppose use of DFWP field personnel for enforcement activity.

[e]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

Toll-Free "Report Line." For several years, the Department has maintained a toll-free telephone number for the public's use in reporting violations of fish, game, and park regulations and landowner problems. Table 5.7 presents a summary of the responses to several questions concerning this toll-free number. First of all, the respondents overwhelmingly approved of a toll-free number for reporting problems; over 90 percent were in favor, while only about 8 percent were opposed. Among the various respondent groups (including landowners), no less than 88 percent supported the idea of a toll-free number. This response pattern reinforces the earlier finding that many persons think that more of the burden for enforcement and reporting of violations should be borne by participants and the public.

Despite the popularity of a toll-free number, only about 21 percent of the respondents were aware that one already exists (the "Report Line"). Hunting and fishing enthusiasts, however, appeared to be more knowledgeable; about 35 percent of the hunters and 26 percent of the fishermen were aware of the number, while only about 13 percent of the nonhunters and 12 percent of those who did not fish knew of the number.

The "Report Line" is intended not only for the recreationists' or the public's use in reporting violations, but also for the landowners' use in reporting problems such as trespass and property damage. Although landowners, like the hunting and fishing enthusiasts, appeared more knowledgeable than their opposites (nonowners), only about 24 percent were actually aware of the "Report Line." This was only slightly greater than the awareness indicated among all respondents as a whole and was much less than that reported among hunters.

Table 5.7

Responses regarding a Toll-Free Telephone Number for Reporting Violations by Residence, Fishing and Hunting Participation, and Landowner Status

	Respondents Favoring a Toll-Free Number		Respondents Aware of Toll-Free Number		Respondents Who Have Used the Toll-Free Number	
	Percentage of Total	*Number of Respondents*[a]	Percentage of Total	*Number of Respondents*[a]	Percentage of Total	*Number of Respondents*[a]
All respondents	91.4	*1,234*	20.6	*1,234*	1.1	*1,234*
Residence, by DFWP region						
Region 1	90.2	*122*	23.0	*122*	2.5	*122*
Region 2	90.0	*211*	18.9	*212*	1.4	*212*
Region 3	88.1	*194*	23.8	*193*	2.1	*193*
Region 4	93.7	*284*	21.5	*284*	1.1	*284*
Region 5	93.2	*220*	19.5	*220*	0.0	*220*
Region 6	88.5	*104*	15.4	*104*	0.0	*104*
Region 7	94.9	*99*	20.2	*99*	0.0	*99*
Residence, by size of county[b]						
Seven largest counties	91.9	*715*	21.0	*715*	---[c]	*715*
All other counties	90.8	*519*	20.0	*519*	---[c]	*519*
Fishing participation in 1979						
Did not fish in Montana	89.3	*507*	12.4	*507*	---[c]	*507*
Did fish in Montana	92.8	*727*	26.2	*727*	---[c]	*727*
Hunting particlpation in 1979						
Did not hunt in Montana	90.0	*798*	12.9	*798*	---[c]	*798*
Did hunt in Montana	94.0	*436*	34.6	*436*	---[c]	*436*
Landowner status						
Landowner	89.4	*284*	23.6	*284*	---[c]	*284*
Nonowner	92.0	*950*	19.7	*950*	---[c]	*950*

Note: Only the affirmative responses are shown, as a percentage of all persons responding.

[a]Three persons (or 0.2 percent of the total sample) did not respond.

[b]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

[c]Although some percentage detail is shown for this question for comparison purposes only, both the actual number and the percentage of affirmative responses in <u>every</u> case is too small to allow for reliable analysis.

Further, only thirteen of the respondents, or barely 1 percent of the sample, said they had actually used the toll-free "Report Line" to report a violation or related problem. This is too few responses for a reliable analysis; but, it is interesting to note that, as shown in table 5.7, most of the "Report Line" users lived in the western part of the state.

Awareness of Local Game Warden. The respondents were also asked if they knew who their local game warden is and how to contact him if necessary. Statewide, about 27 percent of the respondents stated that they knew who their local game warden is (table 5.8). This knowledge varied significantly, however, among the administrative regions: from about 51 percent in region 1 (northwest) to only 19 percent in region 5 (south central). It appears that persons living in rural areas were better acquainted with their local game warden than were the residents of the urban areas; only about 16 percent of the people living in the seven largest counties said they knew who their local game warden is, compared to 42 percent in the remaining forty-nine counties. As expected, hunting and fishing enthusiasts were considerably more knowledgeable; about 43 percent of the hunters and 32 percent of the fishermen knew who their local game warden is, compared to 18 or 19 percent for persons not participating in these activities.

Even though most of the respondents did not know who their local game warden is, almost three-fourths (74 percent) said they did know how to contact him if necessary.

Table 5.8

Awareness of Local Game Warden, by Residence and Fishing and Hunting Participation

	Respondent Knows Local Game Warden		Respondent Able To Contact Local Game Warden	
	Percentage of Total	*Number of Respondents*[a]	Percentage of Total	*Number of Respondents*[b]
ll respondents	26.9	*1,236*	74.1	*1,234*
esidence, by DFWP region				
Region 1	50.8	*122*	81.0	*121*
Region 2	20.8	*212*	68.4	*212*
Region 3	25.3	*194*	72.0	*193*
Region 4	21.8	*285*	75.1	*285*
Region 5	19.1	*220*	74.5	*220*
Region 6	42.3	*104*	77.9	*104*
Region 7	29.3	*99*	73.7	*99*
esidence, by county size[c]				
Seven largest counties	15.9	*717*	72.3	*716*
All other counties	42.0	*519*	76.4	*518*
Fishing participation in 1979				
Did not fish in Montana	19.3	*508*	65.5	*507*
Did fish in Montana	32.1	*728*	80.1	*727*
Hunting participation in 1979				
Did not hunt in Montana	18.3	*800*	67.3	*798*
Did hunt in Montana	42.7	*436*	86.5	*436*

Note: Only the affirmative responses are shown, as a percentage of all persons responding.
[a]One person (or 0.1 percent of the total sample) did not respond.
[b]Three persons (or 0.2 percent of the total sample) did not respond.
[c]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

Required Conservation Education Course

Conservation education for young people is believed by many to lead to or at least help foster more responsible attitudes among adults toward fish and wildlife and their environments. Even more specifically, some people feel that students in Montana's public elementary schools should be required to have a course in conservation education that would cover fish, wildlife, and plant life and their relationships to their environments. This idea was included in the survey, and the respondents were asked if they would generally favor or oppose such a requirement. No less than 74 percent of the respondents, statewide or in any respondent group, favored such a requirement, and only 24 percent at the most (in region 1) were opposed (table 5.9). As was stated earlier about the question dealing with the idea of controlling or regulating subdivision activities along rivers, this apprently overwhelming approval should be viewed with some caution. For one reason, the question addressed the idea of such a requirement in a general sense for a general reaction. Also, had several alternatives been offered with varying content and varying degrees of "requirements," there may well have been a wider range of responses. Nevertheless, especially for those involved in conservation education, it should be helpful to know that the idea of conservation education for Montana youth was relatively well received.

Sources of Information on Outdoor Recreation and Recreation Issues

It is helpful to those involved in public information and education efforts to know where people get their information and where (or in

Table 5.9

Opinions regarding a Required Conservation Education Course
by Residence and License Status

(In Percentages)

	Favor	Oppose	Other Response	Total	*Number of Respondents*
All respondents	77.9	19.6	2.4	100.0	*1,232*
Residence, by DFWP region					
Region 1	74.4	24.0	1.7	100.0	*121*
Region 2	81.1	15.6	3.3	100.0	*212*
Region 3	75.6	21.8	2.6	100.0	*193*
Region 4	78.2	19.7	2.1	100.0	*284*
Region 5	76.7	21.9	1.4	100.0	*219*
Region 6	78.8	17.3	3.8	100.0	*104*
Region 7	80.8	16.2	3.0	100.0	*99*
Residence, by county size[a]					
Seven largest counties	78.4	19.9	1.7	100.0	*712*
All other counties	77.3	19.2	3.5	100.0	*520*
License status					
DFWP license holder	79.3	19.1	1.6	100.0	*728*
Nonholder	76.0	20.4	3.6	100.0	*504*

Notes: Percentage detail does not add to total due to rounding. Five persons (or 0.4 percent of the total sample) did not respond.
[a]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

what sources) they place their confidence. The respondents were asked specifically about where they usually pick up information about fish and wildlife, the outdoors, or outdoor recreation.

The survey results show that Montanans tend to rely more on "word of mouth" for such information than other sources. "Word of mouth" refers to getting information from friends, family, work associates, and other community members; and about 58 percent of the respondents cited this source (table 5.10). Respondents were allowed to cite more than one source, and others frequently mentioned were newspapers (42 percent) and magazines and television (about 33 percent for each).

There were few differences in responses among the respondents from the various regions. The only statistically significant difference was that the respondents in region 5 (south central) cited newspapers as a source more frequently than did those in the other regions; respondents residing in region 4 (north central) cited newspapers the least often. The license holders surveyed mentioned word of mouth relatively more often (63 percent) than did the nonholders (about 52 percent); on the other hand, nonholders cited television as an information source significantly more often (about 40 percent) than did license holders (28 percent).

When asked which information source they placed the most confidence in for information regarding recreation issues, respondents again, by a large margin, cited word of mouth. Overall, about 36 percent mentioned this source (table 5.11). Of the other sources mentioned, only newspapers (mentioned by 15 percent of the respondents) and magazines (10 percent) were cited by at least 10 percent of those responding. Television was

Table 5.10

Sources of Information about Outdoor Recreation Subjects and Issues
by Residence and License Status

(In Percentages)

	Television	Radio	Newspapers	Magazines	Other Printed Material[a]	Word of Mouth[b]	Government Agencies	Own Experience	Other	Total	*Number of Respondents*[c]
All respondents	32.7	13.2	42.1	32.8	12.0	58.5	13.5	9.0	19.2	100.0	*1,235*
Residence, by DFWP region											
Region 1	23.0	10.7	42.6	28.7	16.4	63.9	16.4	11.5	17.2	100.0	*122*
Region 2	30.7	13.7	42.0	31.1	15.1	59.9	15.6	9.0	22.2	100.0	*212*
Region 3	34.4	16.9	48.2	32.3	8.2	55.4	13.3	8.2	22.0	100.0	*195*
Region 4	31.3	14.8	33.1	30.6	12.7	57.4	16.9	11.6	19.7	100.0	*284*
Region 5	37.3	10.0	51.4	35.9	10.9	54.5	10.5	7.7	16.8	100.0	*220*
Region 6	35.0	10.7	39.8	39.8	8.7	61.2	7.8	6.8	19.4	100.0	*103*
Region 7	37.4	13.1	37.4	34.3	11.1	63.6	9.1	5.1	3.1	100.0	*99*
Residence, by county size[d]											
Seven largest counties	31.6	13.8	42.3	33.0	12.6	58.9	14.4	10.3	19.4	100.0	*716*
All other counties	34.3	12.3	41.8	32.6	11.2	57.8	12.3	7.1	18.9	100.0	*519*
License status											
DFWP license holder	27.8	12.5	41.9	36.3	13.8	63.3	14.5	11.4	17.0	100.0	*730*
Nonholder	39.8	14.3	42.4	27.7	9.3	51.5	12.1	5.5	22.4	100.0	*505*

Note: The percentage detail does not add to 100.0 because most respondents cited more than one source of information.
[a]Includes newsletters, pamphlets, maps, and other similar printed materials.
[b]Includes information obtained from friends, community members, family members, work associates, hunting and fishing companions, etc.
[c]Two persons (or 0.2 percent of the total sample) did not respond.
[d]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

Table 5.11

Sources of Recreation Information in which Respondents Place Most Confidence
by Residence and License Status

(In Percentages)

	Television	Radio	Newspapers	Magazines	Other Printed Material[a]	Word of Mouth[b]	Government Agencies	Own Experience	Other	Total	*Number of Respondents*[c]
All respondents	8.2	2.3	15.0	10.2	3.2	35.6	8.2	5.9	11.5	100.0	*1,128*
Residence, by DFWP region											
Region 1	3.5	0.9	13.2	5.3	4.4	45.6	7.9	7.9	11.4	100.0	*114*
Region 2	8.7	1.1	13.0	11.4	3.8	35.3	10.3	5.4	10.9	100.0	*184*
Region 3	7.2	6.1	16.6	12.2	1.7	27.6	6.1	6.6	16.0	100.0	*181*
Region 4	10.0	1.6	12.8	11.6	3.2	34.4	9.6	6.4	10.4	100.0	*250*
Region 5	7.8	1.9	18.4	8.3	3.4	38.3	8.7	3.4	9.7	100.0	*206*
Region 6	7.3	2.1	14.6	11.5	2.1	34.4	6.3	9.4	12.5	100.0	*96*
Region 7	11.3	2.1	16.5	9.3	4.1	38.1	5.2	3.1	10.3	100.0	*97*
Residence, by county size[d]											
Seven largest counties	7.4	2.6	14.9	10.6	2.6	36.5	8.8	6.3	10.3	100.0	*650*
All other counties	9.2	1.9	15.1	9.6	4.0	34.5	7.3	5.2	13.2	100.0	*478*
License status											
DFWP license holder	5.8	1.6	14.1	10.9	3.5	37.4	9.9	7.4	9.4	100.0	*688*
Nonholder	11.8	3.4	16.4	9.1	2.7	33.0	5.5	3.4	14.8	100.0	*440*

Note: The percentage detail may not add to 100.0 due to rounding.
[a]Includes newsletters, pamphlets, maps, and other similar printed materials.
[b]Includes information obtained from friends, community members, family members, work associates, hunting and fishing companions, etc.
[c]One hundred nine persons (or 9.7 percent of the total sample) did not respond.
[d]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

mentioned by 8 percent of the respondents as were government agencies (such as the Department). There were no significant differences among the respondents from the seven regions, or between those in the seven largest counties and the rest of the state. License holders and nonholders also seemed to agree, for the most part, on the information sources in which they place the most confidence.

Montana Outdoors Magazine

As was noted in table 5.10, almost a third of the respondents indicated that they turned to magazines (in general) for information on outdoor recreation and related issues. One of the magazines in Montana that deals with outdoor recreation and related issues is *Montana Outdoors*, published by the Department, and it is apparently relatively well known among Montanans. Almost 89 percent of the respondents acknowledged seeing *Montana Outdoors* (table 5.12). Among the various respondent groups, no less than about 85 percent were aware of the magazine (had seen it). License holders, however, were significantly more aware of the magazine (91 percent had seen it) than were nonholders (about 85 percent), although the latter is still a sizable majority.

Unfortunately, while the magazine is relatively well known, apparently very few actually subscribe to it. Less than 20 percent of the respondents reported being subscribers (table 5.12). Among the various respondent groups, subscribers represented anywhere from about 13 to 25 percent of the respondents. License holders again were more likely to be subscribers than were nonholders (about 23 percent and 13 percent, respectively), although this was not a significant difference.

Table 5.12

Awareness of Montana Outdoors Magazine and Subscription Status
by Residence and License Status

(In Percentages)

	Ever Seen Montana Outdoors?			Subscribe to Montana Outdoors?[a]		
	Yes	No	*Number of Respondents*	Yes	No	*Number of Respondents*
All respondents	88.6	9.8	*1,237*	18.8	80.9	*1,096*
Residence, by DFWP region						
Region 1	88.5	10.7	*122*	25.0	74.1	*108*
Region 2	87.3	9.9	*212*	16.2	83.2	*185*
Region 3	89.2	9.7	*195*	20.6	79.4	*175*
Region 4	90.9	8.1	*285*	17.8	81.8	*258*
Region 5	87.3	10.9	*220*	17.7	82.3	*192*
Region 6	88.5	8.7	*104*	21.7	78.3	*92*
Region 7	86.9	12.1	*99*	15.1	84.9	*86*
Residence, by county size[b]						
Seven largest counties	89.5	9.1	*717*	18.6	81.4	*644*
All other counties	87.3	10.8	*520*	19.0	80.3	*452*
License status						
DFWP license holder	91.2	7.3	*730*	22.6	77.2	*667*
Nonholder	84.8	13.4	*507*	12.8	86.7	*429*

Note: Percentage detail does not add to 100.0 because miscellaneous responses were omitted from the table.

[a]Asked only of those who reported they had seen Montana Outdoors.

[b]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

Nonsubscribers were also asked their reasons for not subscribing to *Montana Outdoors*. Almost a third of the nonsubscribers said they really had no particular reason for not subscribing:

Reasons for Not Subscribing to *Montana Outdoors*

	Percentage of Total
No particular reason	30.5
Able to read someone else's copy	14.3
Just not interested in it or subject	14.2
Lack of money; cannot afford to subscribe	12.0
Not enough time to read magazines, etc.	7.6
Have other priorities for my time and money	7.2
Buy single issues occasionally or frequently	3.0
Dislike the magazine	2.5
Other response	8.6
Total	100.0
Number of respondents	*872*

About 14 percent indicated they were able to read someone else's copy, and another 3 percent acknowledged that they did buy single issues now and then. Only about 2 percent actually said they dislike the magazine. The rest said they couldn't afford to subscribe, lacked the time for such outside reading, had other priorities for what time and money they did have available, or just were not interested in the magazine or the subject.

Overall Performance of the Montana Department of Fish, Wildlife, and Parks

Throughout the survey, the respondents were asked their opinions regarding different Department programs and activities, and their opinions often differed depending on the subject. One question, however, asked specifically about the Department's performance overall, all things considered. Statewide, about 71 percent felt its performance was "good" and another 11 percent said "excellent," while only 13 percent said "fair" or "poor" (barely 2 percent actually said "poor"). Among the various respondent groups, no less than about 79 percent said "good" or "excellent" (table 5.13). Slightly more license holders and fishing enthusiasts rated the Department's performance as "good" or "excellent" than did their opposites. However, nonhunters were slightly more complimentary than were hunters. (None of these differences were significant.)

Table 5.13

Opinions regarding the Overall Performance of the Montana Department of Fish, Wildlife, and Parks by Residence, License Status, and Fishing and Hunting Participation

(In Percentages)

	Excellent	Good	Fair	Poor	*Number of Respondents*
All respondents	10.6	71.4	11.3	1.6	*1,218*
Residence, by DFWP region					
Region 1	11.6	70.2	12.4	3.3	*121*
Region 2	10.0	68.9	12.0	0.0	*209*
Region 3	12.6	68.9	9.5	2.1	*190*
Region 4	11.7	71.5	11.0	1.8	*281*
Region 5	9.6	74.3	9.6	2.3	*218*
Region 6	7.9	74.3	11.9	1.0	*101*
Region 7	8.2	73.5	16.3	1.0	*98*
Residence, by county size[a]					
Seven largest counties	10.6	72.5	10.2	1.6	*708*
All other counties	10.6	70.0	12.9	1.8	*510*
License status					
DFWP license holder	12.0	71.5	11.6	1.9	*726*
Nonholder	8.5	71.3	11.0	7.9	*492*
Fishing participation in 1979					
Did not fish in Montana	8.7	72.1	9.9	1.6	*494*
Did fish in Montana	11.9	71.0	12.3	1.7	*724*
Hunting participation in 1979					
Did not hunt in Montana	10.2	72.8	10.3	0.9	*787*
Did hunt in Montana	11.4	68.9	13.2	3.0	*431*

Notes: Percentage detail does not add to 100.0 because the miscellaneous responses have been omitted from the table. Nineteen persons (or 1.5 percent of the total sample) did not respond.

[a]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

CHAPTER 6

CHARACTERISTICS OF MONTANANS AND THEIR HOUSEHOLDS AS REVEALED BY THE SURVEY

This section briefly discusses the characteristics of Montana households, as described by the survey respondents who live in those households. (Appendix B on the survey sample briefly describes the respondents themselves and compares them with the Montana population.) Also discussed in this section are the characteristics of persons who reported purchasing a license from the Department in 1979. As noted earlier, these persons are referred to as license holders, and those who did not purchase a DFWP license of any kind are referred to as nonholders.

Household Size

Much has been said about increased numbers of households in the United States since 1970 and companion decreases in household size. Data from this survey, as well as data from a statewide housing survey for 1978, suggest that Montana has not escaped this trend. According to preliminary data from the U.S. Bureau of the Census, the number of households in Montana increased about 30 percent during the 1970s. At the same time, average household size has declined: it was reported at 3.10 in 1970, compared to survey estimates of 2.94 for 1978 and 2.88 for 1980 (table 6.1).

Table 6.1

Household Size, by Residence

(In Percentages)

	Average Household Size[a]	Number of Persons in Household					Total	*Number of Respondents*
		1	2	3	4	5 or More		
All respondents	*2.88*	17.5	32.7	17.6	18.4	13.9	100.0	*1,237*
Residence, by county size[b]								
Seven largest counties	*2.79*	17.6	35.0	18.8	17.0	11.6	100.0	*717*
Butte-Silver Bow	*3.05*	14.3	33.9	10.7	25.0	16.1	100.0	*56*
Cascade	*2.73*	22.2	26.7	22.2	19.3	9.6	100.0	*135*
Flathead	*3.11*	15.4	32.3	15.4	18.5	18.5	100.0	*65*
Gallatin	*2.90*	16.7	34.5	20.2	14.3	14.3	100.0	*84*
Lewis and Clark	*2.38*	25.4	38.0	21.1	8.5	7.0	100.0	*71*
Missoula	*2.50*	19.8	40.5	20.6	13.0	6.1	100.0	*131*
Yellowstone	*2.95*	11.4	37.7	17.1	20.0	13.7	100.0	*175*
All other counties	*3.02*	17.3	29.4	16.0	20.4	16.9	100.0	*520*
Residence, by DFWP region								
Region 1	*3.20*	15.6	29.5	15.6	19.7	19.7	100.0	*122*
Region 2	*2.69*	18.4	35.4	20.8	17.0	8.5	100.0	*212*
Region 3	*2.88*	16.4	35.4	16.4	18.5	13.3	100.0	*195*
Region 4	*2.71*	21.1	31.6	21.1	16.1	10.2	100.0	*285*
Region 5	*2.94*	12.3	38.2	15.9	20.0	13.6	100.0	*220*
Region 6	*3.14*	16.3	26.0	16.3	17.3	24.0	100.0	*104*
Region 7	*3.04*	22.2	23.2	11.1	24.2	19.2	100.0	*99*

Note: Percentage detail does not add to total due to rounding.

[a] Average number of persons in the household.

[b] The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

The seven largest counties, as a group, and the rest of the state followed this statewide pattern somewhat closely. The seven-county area, however, was more likely to have smaller households: more than 70 percent of the households had three or fewer persons, but over half (53 percent) had only one or two; the average overall was 2.79 persons per household. In the rest of the state, while almost 63 percent had three or fewer persons, less than half (47 percent) had one or two persons and the average overall was 3.02 persons.

Among the seven largest counties, there was about a 30 percent variation in overall household size. Lewis and Clark (Helena) and Missoula counties, for example, tended to be at the smaller end of the scale with averages of 2.38 and 2.50 persons, respectively; no less than 80 percent of their households had three or fewer persons. At the larger end were Butte-Silver Bow and Flathead (Kalispell) counties with average sizes of slightly over three persons. In these latter two counties, as well as Yellowstone (Billings), about two-thirds or more of the households had between two and four persons. Cascade (Great Falls) and Gallatin (Bozeman) fell in between, with about 70 percent of their households having three or fewer persons. In all cases, however, the most prevalent household size was two persons.

There was less variation in average household size among the seven administrative regions, but some differences are worth noting. Largest in average size was region 1 (northwest) with 3.20 persons, followed by the two eastern regions (region 6 and 7) with averages slightly over three persons each. These three regions were more likely than the others to have households of three persons or more (although in all cases at least a majority had between two and four persons). At the smaller end

were regions 2 (west central) and region 4 (north central), with averages of 2.69 and 2.71 persons, respectively. Roughly three-fourths of the households in these regions had three or fewer persons.

In most cases, the most prevalent household size was two persons, except in the strongly rural eastern part of the state. Region 6 (northeast), for example, had almost as many larger households with five or more persons as it had households with only two persons; and region 7 (southeast) had almost equal numbers of households with one, two, and four persons.

Type of Household

The surveyed households were classified into household types based, first, on "family" status -- "family households" with one person living alone or unrelated individuals living together.[1] The family households (which are, by definition, multiperson households) were further classified by the type of householder (or household head) -- husband-wife households, in which either the husband or wife is considered the householder and both are present in the household, and those in which either the householder is unmarried or the spouse is not living in the household. The nonfamily households were further classified by size -- households with one person and those with more than one person.

Not unexpectedly, most households in the state are family households and the more conventional husband-wife households predominate: well over

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[1]This is a revision from the way households have been classified in the past but is the classification now used by the U.S. Bureau of the Census and has been adopted in order to facilitate comparison with census data where available.

two-thirds of the surveyed households were husband-wife households (table 6.2). Another 16 percent were households with only one person.

Husband-wife households were also the vast majority in all the geographic areas presented, although there were some differences that are worth noting. For example, among the seven largest counties, Butte-Silver Bow, Flathead, and Yellowstone counties had the highest proportions of husband-wife households and among the lowest proportions of one person households. In contrast, the other four counties, for the most part, had the lowest proportions of husband-wife households and higher proportions of one person households. Cascade and Lewis and Clark (Helena) counties had the highest proportions of one person households (over 20 percent in each).

Characteristics of Householders

Each surveyed household was asked to indicate the individual considered by its members to be the head of the household, or what is referred to as the "householder."[2] In most instances, the householder designations followed traditional patterns -- that is, among husband-wife households, the husband was usually (but not always) considered the householder.

Since the conventional husband-wife households predominate in the state and since the husbands in those households were more likely to be the householders, it is no surprise that the surveyed households were more likely to be headed by males than by females. Statewide, the vast majority (almost 79 percent) of the householders were male, while about 21 percent

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[2]This new designation "householder" is used in order to be compatible with new U.S. Census Bureau practices.

Table 6.2

Type of Household, by Residence

(In Percentages)

	Family Households[a]		Nonfamily Households[b]			
	Husband-Wife	Other	One Person	More Than One Person	Total	Number of Respondents[c]
All respondents (households)	70.9	8.7	16.5	3.9	100.0	1,224
Residence, by county size[d]						
Seven largest counties	69.7	8.5	16.7	5.0	100.0	714
Butte-Silver Bow	75.0	8.9	14.3	1.8	100.0	80
Cascade	68.9	8.1	21.5	1.5	100.0	135
Flathead	75.4	9.2	15.4	0.0	100.0	65
Gallatin	68.7	6.0	14.5	10.8	100.0	83
Lewis and Clark	64.3	5.7	24.3	5.7	100.0	70
Missoula	64.6	10.8	19.2	5.4	100.0	130
Yellowstone	73.1	9.1	10.3	7.4	100.0	175
All other counties	72.5	8.8	16.3	2.3	100.0	520
Residence, by DFWP region						
Region 1	73.8	9.8	15.6	0.8	100.0	122
Region 2	66.8	10.4	18.0	4.7	100.0	211
Region 3	70.6	7.7	15.5	6.2	100.0	194
Region 4	69.4	8.1	20.1	2.5	100.0	284
Region 5	73.2	9.5	11.4	5.9	100.0	220
Region 6	75.0	7.7	13.5	3.8	100.0	104
Region 7	71.7	6.1	21.2	1.0	100.0	99

Note: Percentage detail may not add to total due to rounding.
[a]Consist of relatives living together: married couple, with or without children; or a man or woman with children, or any other combination of relatives living together.
[b]An individual living alone or unrelated individuals living together.
[c]Three persons (or 0.2 percent of the total sample) did not respond.
[d]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

were female (table 6.3). Significant differences were found between Missoula and Yellowstone counties and between the regions in which they are located. Missoula was low with 75 percent male householders and, thus, high with 25 percent female householders. In contrast, 86 percent of the Yellowstone householders were male and only 14 percent were female. Regions 2 (Missoula) and 5 (Yellowstone) showed roughly the same proportions.

In terms of age, most of the surveyed households were headed by persons thirty-five years of age and older. Statewide, 37 percent of the householders were under thirty-five, while over 60 percent were thirty-five and older; the estimated median (middle) age overall was forty-two years (table 6.4).

The patterns were much the same among the seven largest counties (individually and as a group) as well as the rest of the state and did not differ significantly from the statewide distribution. Butte-Silver Bow and Flathead, among the largest counties, were the highest with at least two-thirds of their householders in this older age group. Missoula and Yellowstone tended to be lower with only 53 and 56 percent, respectively, in the older age group, which accounted for the lower median ages in those counties. The other three counties, as well as the rest of the state, fell in between.

While these differences were not statistically significant, there is one notable difference between Butte-Silver Bow and Flathead. In both of these counties, almost the same proportions of householders were in the older age group. Yet, the estimated median age of householders in

Table 6.3

Sex of Householder (Household Head), by Residence

(In Percentages)

	Male Householder	Female Householder	Total	*Number of Respondents*[a]
All respondents (households)	78.6	21.4	100.0	*1,223*
Residence, by county size[b]				
Seven largest counties	79.5	20.5	100.0	*708*
Butte-Silver Bow	85.7	14.3	100.0	*56*
Cascade	77.6	22.4	100.0	*134*
Flathead	76.9	23.1	100.0	*65*
Gallatin	77.1	22.9	100.0	*83*
Lewis and Clark	75.7	24.3	100.0	*70*
Missoula	75.0	25.0	100.0	*128*
Yellowstone	86.0	14.0	100.0	*172*
All other counties	77.3	22.7	100.0	*515*
Residence, by DFWP region				
Region 1	76.2	23.8	100.0	*122*
Region 2	75.0	25.0	100.0	*208*
Region 3	80.3	19.7	100.0	*193*
Region 4	76.6	23.4	100.0	*282*
Region 5	83.9	16.1	100.0	*217*
Region 6	80.4	19.6	100.0	*102*
Region 7	77.8	22.2	100.0	*99*

Note: Householders include those who said they share householder (head of household) status with a spouse or other household member.

[a]Fourteen persons (or 1.1 percent of the total sample) did not respond.

[b]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

Table 6.4

Age of Householder (Household Head), by Residence

(In Percentages)

	Estimated Median Age (Years)	18 to 24 Years	25 to 34 Years	35 to 44 Years	45 to 64 Years	65 Years and Over	Total	*Number of Respondents*[a]
All respondents (households)	*42*	8.1	28.9	18.2	30.0	14.7	100.0	*1,215*
Residence, by county size[b]								
Seven largest counties	*41*	8.8	31.2	17.8	28.6	13.7	100.0	*703*
Butte-Silver Bow	*52*	1.8	30.4	8.9	30.4	28.6	100.0	*56*
Cascade	*41*	9.7	29.1	18.7	28.4	14.2	100.0	*134*
Flathead	*43*	1.6	28.1	25.0	29.7	15.6	100.0	*64*
Gallatin	*40*	12.2	28.0	20.7	28.0	11.0	100.0	*82*
Lewis and Clark	*45*	14.3	21.4	14.3	31.4	18.6	100.0	*70*
Missoula	*37*	11.0	36.2	15.0	26.8	11.0	100.0	*127*
Yellowstone	*38*	7.6	35.9	19.4	28.2	8.8	100.0	*170*
All other counties	*44*	7.2	25.8	18.8	32.0	16.2	100.0	*512*
Residence, by DFWP region								
Region 1	*43*	4.2	27.5	24.2	29.2	15.0	100.0	*120*
Region 2	*42*	9.2	29.5	16.9	30.4	14.0	100.0	*207*
Region 3	*42*	8.4	30.5	15.3	28.9	16.8	100.0	*190*
Region 4	*43*	10.6	25.5	16.7	32.6	14.5	100.0	*282*
Region 5	*40*	6.0	33.5	20.5	28.4	11.6	100.0	*215*
Region 6	*42*	8.8	28.4	18.6	32.4	11.8	100.0	*102*
Region 7	*44*	7.1	26.3	18.2	26.3	22.2	100.0	*99*

Notes: Householders include those who said they share householder (head of household) status with a spouse or other household member. Percentage detail may not add to total due to rounding.

[a]Twenty persons (or 1.8 percent of the total sample) did not respond.

[b]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

Butte-Silver Bow was fifty-two years, compared to only forty-three years in Flathead County. A closer look at the data indicates that well over half the householders in Butte-Silver Bow were forty-five years of age or older, and almost 30 percent were sixty-five and older. This can probably be explained largely by the significant reductions over the last few years in mining jobs and related employment in the area; many younger householders of working age have probably moved their families to other areas to seek employment.

The age distributions among the seven regions were relatively similar and showed much less variation than was the case with the seven largest countries.

Incomes of Montana Households in 1979

The survey participants were also asked about the incomes of their households in 1979 -- total income from all sources and before taxes and other deductions. Only about 7 percent of the sample refused to answer or gave incomplete information.

Of those responding, just about half reported household incomes between $15,000 and $35,000 in 1979, while slightly over 10 percent reported incomes over $35,000. The rest, 38 percent, had incomes of $15,000 and under in 1979 (table 6.5).

For the most part, the distributions of 1979 household incomes were relatively similar in the seven largest counties and the rest of the state, as a whole: the largest segments (from about 44 to 54 percent) reported 1979 incomes between $15,000 and $35,000, the next largest segments had

Table 6.5

Incomes of Montana Households in 1979, by Residence

(In Percentages)

	$5,000 or Less	$5,001 to $10,000	$10,001 to $15,000	$15,001 to $20,000	$20,001 to $35,000	Over $35,000	Total	*Number of Respondents*[a]
All respondents	7.3	13.4	17.5	19.2	30.6	12.0	100.0	*1,146*
Residence, by county size[b]								
Seven largest counties	6.0	14.5	17.1	19.6	31.9	10.9	100.0	*668*
Butte-Silver Bow	5.8	26.9	17.3	11.5	32.7	5.8	100.0	*52*
Cascade	4.8	12.8	19.2	25.6	25.6	12.0	100.0	*125*
Flathead	6.5	14.5	19.4	16.1	33.9	9.7	100.0	*62*
Gallatin	8.0	12.0	12.0	17.3	36.0	14.7	100.0	*75*
Lewis and Clark	10.1	17.4	17.4	17.4	30.4	7.2	100.0	*69*
Missoula	7.6	14.4	15.3	19.5	33.9	9.3	100.0	*118*
Yellowstone	3.0	12.0	18.0	21.0	32.9	13.2	100.0	*167*
All other counties	9.2	11.7	18.2	18.6	28.9	13.4	100.0	*478*
Residence, by DFWP region								
Region 1	9.7	12.4	17.7	15.9	37.2	7.1	100.0	*113*
Region 2	7.3	14.0	16.1	20.2	32.1	10.4	100.0	*193*
Region 3	7.9	15.2	14.6	17.4	34.3	10.7	100.0	*178*
Region 4	8.1	14.4	18.5	22.6	25.6	10.7	100.0	*270*
Region 5	5.3	11.0	19.1	20.1	31.6	12.9	100.0	*209*
Region 6	5.5	7.7	22.0	16.5	24.2	24.2	100.0	*91*
Region 7	7.6	17.4	15.2	15.2	31.5	13.0	100.0	*92*

Note: Percentage detail may not add to total due to rounding.

[a]Ninety-one persons (or 7.4 percent of the total sample) did not respond.

[b]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

incomes of $15,000 and under, and the smallest segment (from about 6 to 15 percent) reported incomes over $35,000. The one notable exception to this was Butte-Silver Bow: the largest segment in that county (about 50 percent of the households) reported household incomes of $15,000 and under in 1979. Earlier it was noted that the county had experienced significant reductions in jobs, and that almost 30 percent of the households surveyed were headed by persons sixty-five years of age and older, which may account for some of the lower household incomes in the county.

Gallatin and Yellowstone counties, compared to the other large counties, had greater proportions of their households in the upper income categories: about 51 and 46 percent, respectively, had incomes over $20,000 and about 15 and 13 percent reported incomes over $35,000. Lewis and Clark County had the largest proportion of households with incomes of $5,000 or less. This may be explained somewhat by the relatively larger proportion of one person households in the county, and many of these may be students (students tend to occupy the lower income categories).

The distribution of incomes for the forty-nine smaller counties as a whole was almost identical to the statewide distribution and to that for the seven-county group. Any differences were not significant.

The income distributions in the various regions were relatively similar and also not unlike the statewide distribution. As was the case in most of the other areas, the largest segments in the regions (41 to 53 percent) reported incomes between $15,000 and $35,000 in 1979. The northeast part of the state (region 6) had the largest proportion of households in the upper income categories: about 48 percent with incomes over $20,000, and almost 25 percent reporting incomes over $35,000.

Table 6.6 presents estimates of median household incomes by residence. (The median is, as noted before, the halfway point in a distribution -- thus, half the respondents were above that midpoint and half were below.) The median figures presented here should be used carefully because they are derived from grouped data and are less accurate than medians derived using actual (ungrouped) amounts. It should also be noted that not all the respondents were the heads of their households (almost 40 percent were not) and, thus, the nonhouseholder respondents may not have had as accurate knowledge about total household income as did the householder respondents. Nevertheless, the estimated medians provide another relative measure of income and serve to reinforce the earlier observations. For example, Butte-Silver Bow and Lewis and Clark counties had the lowest medians ($15,000 and $16,500, respectively); Gallatin and Yellowstone, on the other hand, had the highest ($20,000 and $19,100, respectively). The forty-nine smaller counties, as a whole, had a median income of $17,900 which put them slightly below the state as a whole. Most of the regions had medians above the statewide figure, especially region 6, which was highest at $19,500.

Length of Residence in Current Place

Based on the experiences of the survey respondents, the majority of Montana residents have not changed communities in over ten years. Statewide, around 54 percent of the respondents had lived in their current communities over ten years. At the same time, however, almost a third were "relative newcomers" who had lived in their current communities five years

Table 6.6

Estimated Median Incomes of Montana Households in 1979 by Residence

	Median Income (Estimated)
All respondents (households)	18,100
Residence, by county size[a]	
Seven largest counties	18,200
Butte-Silver Bow	15,000
Cascade	17,600
Flathead	18,000
Gallatin	20,200
Lewis and Clark	16,500
Missoula	18,300
Yellowstone	19,100
All other counties	17,900
Residence, by DFWP region	
Region 1	18,200
Region 2	18,100
Region 3	18,500
Region 4	17,000
Region 5	18,600
Region 6	19,500
Region 7	18,200

Note: These medians have been estimated using grouped or summarized data (income groupings) rather than actual ungrouped dollar amounts and, therefore, are less accurate than medians derived from ungrouped dollar amounts.
[a]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

or less; about 10 percent were "recent movers" who had lived in their current communities for only a year or less (table 6.7).

The forty-nine smaller counties, as a whole, did not differ significantly from the state overall, although slightly more had resided in their same communities over ten years, and slightly fewer were recent movers.

There were, however, some significant differences among the seven largest counties. The most striking differences were among residents of Butte-Silver Bow and Gallatin counties. In Butte-Silver Bow, for example, barely 10 percent of the respondents were relative newcomers (had lived in the county five years or less), while over 80 percent had lived there more than ten years. The county that came closest to Butte-Silver Bow in terms of such a preponderance of long-term residents was Lewis and Clark County with barely 54 percent. Gallatin County, on the other hand, had a significantly smaller percentage of long-term residents -- only 32 percent -- and a greater proportion of relative newcomers (five years or less) -- 46 percent. Missoula County also had a relatively smaller proportion of long-term residents (48 percent) and a larger proportion of relative newcomers (about 37 percent), but not as extreme as in Gallatin County. This can probably be explained largely by the fact that Gallatin and Missoula counties are the locations of the two state universities and that college student and faculty populations tend to be more transient. Butte-Silver Bow, on the other hand, in which over 80 percent had not changed communities in over ten years, has been losing population over the last decade and apparently has attracted few new residents.

Table 6.7

Length of Residence in Current Place, by Residence

(In Percentages)

	1 Year or Less	2 to 5 Years	6 to 10 Years	Over 10 Years	Total	*Number of Respondents*[a]
All respondents	9.6	21.5	15.4	53.6	100.0	*1,235*
Residence, by county size[b]						
Seven largest counties	10.1	22.7	15.7	51.6	100.0	*715*
Butte-Silver Bow	0.0	10.7	7.1	82.1	100.0	*56*
Cascade	15.6	16.3	16.3	51.9	100.0	*135*
Flathead	1.5	33.8	12.3	52.3	100.0	*65*
Gallatin	7.1	39.3	21.4	32.1	100.0	*84*
Lewis and Clark	12.7	16.9	16.9	53.5	100.0	*71*
Missoula	9.2	27.5	15.3	48.1	100.0	*131*
Yellowstone	13.3	17.9	16.2	52.6	100.0	*173*
All other counties	8.8	19.8	15.0	56.3	100.0	*520*
Residence, by DFWP region						
Region 1	3.3	30.3	16.4	50.0	100.0	*122*
Region 2	9.0	26.4	13.2	51.4	100.0	*212*
Region 3	6.7	28.2	17.9	47.2	100.0	*195*
Region 4	12.6	16.1	16.5	54.7	100.0	*285*
Region 5	12.4	17.4	16.1	54.1	100.0	*218*
Region 6	9.6	18.3	9.6	62.5	100.0	*104*
Region 7	9.1	14.1	15.2	61.6	100.0	*99*

Note: Percentage detail may not add to total due to rounding.
[a]Two persons (or 0.2 percent of the total sample) did not respond.
[b]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

Among the regions, the patterns were relatively similar and did not differ significantly from the state as a whole. In each region, the largest segment of the population (in most cases, a majority of between 50 and 62 percent) had not changed communities in over ten years.

Discussions of the proportions of relative newcomers in the state -- 31 percent statewide, almost 37 percent in Missoula, over 46 percent in Gallatin, etc. -- may conjure up in the reader's mind a vision of streams of people moving into Montana. However, additional survey data (on residences five years ago) suggest that much, if not most, of the activity or movement has involved Montanans changing residences within the state rather than moving in from outside Montana.

Statewide, as noted earlier, about 31 percent of the residents had lived in their current communities five years or less -- or, stated another way, 31 percent had lived outside their current communities about five years ago. However, the additional residence data for the state as a whole indicate that only 13 percent of the respondents lived outside Montana five years earlier:

Residence of Montanans Five Years Ago
(In 1975)

	Percentage of Total
Montana	86.9
Out of state	13.1
Total	100.0
Number of respondents	*1,071*

Thus, the rest of the relative newcomers (five years or less in current communities), the other 18 percent, apparently moved from elsewhere in the state.

In the case of Gallatin County, which had the highest proportion of relative newcomers (46 percent), only about 22 percent of the respondents lived outside Montana five years earlier (table 6.8). The rest of the relative newcomers to Gallatin County (about 24 percent) came from elsewhere in the state. Gallatin still had the highest percentage of respondents moving in from out of state, followed closely by Flathead (20 percent). Butte-Silver Bow and Lewis and Clark, on the other hand, had the smallest percentages -- about 2 and 6 percent, respectively. These latter two counties also reported the highest percentages of respondents living in the same county five years ago, especially Butte-Silver Bow with a significantly high 92 percent.

Among the seven regions, anywhere from about 6 to 19 percent of the respondents lived outside Montana five years ago; however, no less than 76 percent lived in the same region (table 6.9). Unfortunately, the sample sizes are too small to determine whether these differences are significant.

License Holders and Nonholders

One of the characteristics more specific to outdoor recreation in Montana was the respondent's status as a holder of a Departmental license for 1979 or as a "nonholder." License holders include those who purchased only the Montana conservation license (many people purchase just the conservation license as a kind of donation) as well as those who also purchased licenses specifically for hunting, fishing, etc.

Table 6.8

Residence of Montanans Five Years Ago (in 1975), by Size of County

(In Percentages)

	Montana				
	Same County or Area	Different County or Area	Out of State	Total	*Number of Respondents*[a]
Seven largest counties	80.2	4.9	14.9	100.0	*712*
Butte-Silver Bow	92.9	5.4	1.8	100.0	*56*
Cascade	74.1	8.1	17.8	100.0	*135*
Flathead	72.3	7.7	20.0	100.0	*65*
Gallatin	69.9	8.4	21.7	100.0	*83*
Lewis and Clark	80.3	14.1	5.6	100.0	*71*
Missoula	71.3	17.1	11.6	100.0	*129*
Yellowstone	74.0	8.1	17.9	100.0	*173*
All other counties	83.5	6.0	10.6	100.0	*520*

Notes: The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each. Percentage detail may not add to total due to rounding.
[a]Five persons (or 0.4 percent of the sample) did not respond.

Table 6.9

Residence of Montanans Five Years Ago (in 1975)
by DFWP Administrative Region

(In Percentages)

	---- Montana -----				
	Same Region	Different Region	Out of State	Total	*Number of Respondents*[a]
Region 1	76.2	4.9	18.9	100.0	*122*
Region 2	76.7	11.4	11.9	100.0	*210*
Region 3	78.9	8.2	12.9	100.0	*194*
Region 4	80.7	7.4	11.9	100.0	*285*
Region 5	77.1	6.0	17.0	100.0	*218*
Region 6	86.5	7.7	5.8	100.0	*104*
Region 7	81.8	7.1	11.1	100.0	*99*

Note: Percentage detail may not add to total due to rounding.
[a]Five persons (or 0.4 percent of the sample) did not respond.

Statewide, over half the respondents (59 percent) reported being DFWP license holders in 1979 (table 6.10). Recent data from the U.S. Census Bureau estimate the adult population (also the survey population) at almost 71 percent of the state total.[3] Given this and the preliminary 1980 census count for the state (783,674), the adult population is approximated at 554,000 persons. This, in turn, given the survey results, translates into approximately 327,000 DFWP license holders in the state.

In each of the seven largest counties and the rest of the state, the majority of the respondents indicated that they were license holders. Among the seven counties, Butte-Silver Bow and Cascade had the lowest percentages of license holders (57 percent) while Gallatin had the highest (71 percent). In each of the regions, as in the seven counties, a majority of respondents reported being license holders; region 6 in the northeast had the smallest percentage (53 percent), while region 1 in the northwest had the highest (68 percent).

Characteristics of License Holders and Nonholders. Now a closer look at some of the characteristics of license holders compared with the nonholders. In terms of current residence, a slightly larger percentage of the license holders (60 percent), compared to the nonholders (54 percent), were living in the seven largest counties; conversely, there was a larger percentage of nonholders living in the forty-nine smaller counties -- about 46 percent compared to about 40 percent for license holders (table 6.11). However, while these differences are noticeable, they are not

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[3]U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-25, no. 879 (Washington, D.C., March 1980), table 2.

Table 6.10

DFWP License Holder Status in 1979
by Residence

(In Percentages)

	License Holders	Nonholders	Total	*Number of Respondents*
All respondents	59.0	41.0	100.0	*1,237*
Residence, by county size[a]				
Seven largest counties	61.5	38.5	100.0	*717*
Butte-Silver Bow	57.1	42.9	100.0	*56*
Cascade	57.0	43.0	100.0	*135*
Flathead	69.2	30.8	100.0	*65*
Gallatin	71.4	28.6	100.0	*84*
Lewis and Clark	62.0	38.0	100.0	*71*
Missoula	58.0	42.0	100.0	*131*
Yellowstone	61.1	38.9	100.0	*175*
All other counties	55.6	44.4	100.0	*520*
Residence, by DFWP region				
Region 1	68.0	32.0	100.0	*122*
Region 2	58.5	41.5	100.0	*212*
Region 3	66.7	33.3	100.0	*195*
Region 4	54.0	46.0	100.0	*285*
Region 5	57.7	42.3	100.0	*220*
Region 6	52.9	47.1	100.0	*104*
Region 7	57.6	42.4	100.0	*99*

[a]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

Table 6.11

Residence of License Holders and Nonholders

(In Percentages)

	License Holders	Nonholders
Current residence, by county size[a]	100.0	100.0
Seven largest counties	60.4	54.4
Butte-Silver Bow	4.4	4.7
Cascade	10.5	11.4
Flathead	6.2	3.9
Gallatin	8.2	4.7
Lewis and Clark	6.0	5.3
Missoula	10.4	10.8
Yellowstone	14.7	13.4
All other counties	39.6	45.6
Current residence, by DFWP region	100.0	100.0
Region 1	11.4	7.7
Region 2	17.0	17.4
Region 3	17.8	12.8
Region 4	21.1	25.8
Region 5	17.4	18.3
Region 6	7.5	9.7
Region 7	7.8	8.3
Residence five years ago (1975)[b]	100.0	100.0
Montana	87.6	85.9
Same DFWP region	79.2	79.2
Different DFWP region	8.4	6.7
Out of state	12.4	14.1

Note: Percentage detail may not add to total due to rounding.
[a]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.
[b]Five persons (or 0.4 percent of the total sample) did not respond.

significant, and these distributions do not differ significantly from the distribution of the overall sample (presented in Appendix B). The same is true for the distributions of these two groups among the regions -- neither differs significantly from each other nor from the distribution of the overall sample.

In terms of length of residence, most license holders and nonholders had lived in their current communities over ten years, but a slightly larger proportion of nonholders were such long-term residents (table 6.12). At the same time, a slightly larger percentage of nonholders were also recent movers, having lived in their current communities only one year or less.

While these differences in terms of residence and the length of residence were notable, they were not significant. There were, however, some significant differences in terms of age, sex, householder status, and employment status.

License holders tended to be younger than nonholders; roughly 50 percent were under thirty-five years of age, compared to about 38 percent for nonholders (table 6.12). Further, a substantial majority of license holders (68 percent) were under forty-five years of age, compared to only about 55 percent of the nonholders. The estimated median ages show this difference more clearly; license holders had a median (middle) age of thirty-five years, compared to forty-two years for nonholders. Almost 41 percent of the license holders were female; compared to nonholders, though, license holders were more likely to be male: 59 percent were male, compared to barely one-fourth of the nonholders (almost 75 percent of the nonholders were female). License holders were also more likely

Table 6.12

Characteristics of License Holders and Nonholders

	License Holders		Nonholders	
Number of respondents	*730*		*507*	
Age of respondent[a]	100.0		100.0	
18-24 years	15.9		16.1	
25-34 years	33.8		21.6	
35-44 years	18.7		16.9	
45-64 years	22.4		27.0	
65 years and over	9.2		18.5	
Estimated median age (in years)		*35*		*42*
Sex of respondent	100.0		100.0	
Male	59.3		25.8	
Female	40.7		74.2	
Length of residence in current place[b]	100.0		100.0	
1 year or less	7.3		12.8	
2- 5 years	25.5		15.6	
6-10 years	16.2		14.2	
Over 10 years	51.0		57.3	
Householder (head of household) status[c]	100.0		100.0	
Householder (head of household)[d]	66.0		54.3	
Not householder	34.0		45.7	
Highest level of formal education[a]	100.0		100.0	
Some high school or less	11.3		15.6	
High school graduate[e]	43.2		38.0	
Some college	23.1		24.0	
College graduate	22.4		22.4	
Estimated median school years completed		*12.9*		*12.9*
Employment status[a]	100.0		100.0	
Employed	73.0		59.8	
Unemployed and looking for work	2.3		4.2	
Not in the labor force	24.7		36.0	
Employed persons, by type of worker[f]	100.0		100.0	
Private sector workers	57.7		58.4	
Government workers	22.0		20.5	
Self-employed persons	20.3		21.1	

Note: Percentage detail may not add to total due to rounding.
[a]Five persons (or 0.4 percent of the total sample) did not respond.
[b]Two persons (or 0.2 percent of the total sample) did not respond.
[c]Twelve persons (or 1.0 percent of the total sample) did not respond.
[d]Includes those who said they share householder (head of household) status with a spouse or other household member.
[e]Includes those with formal technical training beyond high school but not at a junior college or four-year college.
[f]Thirteen employed persons (or 1.1 percent of the total sample) did not respond.

to be householders (household heads): 66 percent were householders compared to 54 percent among nonholders.

In terms of employment status, license holders were more likely to be employed. While the majority in each group was employed, a significantly larger proportion of license holders was employed at the time of the survey (73 percent compared to barely 60 percent of the nonholders). On the other hand, a significantly larger proportion of nonholders was not in the labor force; this is likely a reflection of the predominance of females among the nonholders, since females tend to have lower labor force participation rates than do males. Of those license holders and nonholders who were employed, most (about 58 percent in each group) were private sector wage and salary workers.

There were no notable or significant differences in levels of education among license holders and nonholders: the largest segments in each group had completed some college or more, and the estimated median years of school completed were identical for the two groups.

Household Characteristics of License Holders and Nonholders. Many more of the household differences proved to be significant. The households of license holders tended to be a bit larger, averaging 3.00 persons to 2.72 persons for nonholders (table 6.13). A significantly larger proportion of nonholder households had only one person (25 percent compared to 12 percent for license holders), and slightly over half had only one or two persons; among license holders, only about 46 percent had one or two persons. Earlier it was noted that most households in the state were family households and that the conventional husband-wife households

Table 6.13

Household Characteristics of License Holders and Nonholders

	License Holders	Nonholders
Number of respondents	*730*	*507*
Household size		
Total number of persons in household	100.0	100.0
1	12.2	25.0
2	34.2	30.4
3	18.9	15.8
4	20.7	15.2
5	8.1	8.3
6 or more	5.9	5.3
Average household size	*3.00*	*2.72*
Type of household[a]	100.0	100.0
Family households[b]	84.6	72.3
Husband-wife households	77.8	61.0
Other family households	6.9	11.3
Nonfamily households[c]	15.4	27.7
One person households	11.5	23.8
Multiperson nonfamily households	3.8	4.0
Age of householder (household head)[d]	100.0	100.0
18-24 years	8.8	7.3
25-34 years	33.5	22.2
35-44 years	19.3	16.5
45-64 years	27.8	33.3
65 years or over	10.6	20.8
Sex of householder (household head)[e]	100.0	100.0
Male	86.3	67.4
Female	13.7	32.6
Household income in 1979[f]	100.0	100.0
$ 5,000 or less	4.9	10.9
$ 5,001 to $10,000	9.8	18.7
$10,001 to $15,000	18.5	16.1
$15,001 to $20,000	21.0	16.6
$20,001 to $35,000	32.6	27.7
Over $35,000	13.2	10.0
Estimated median household income	*$19,000*	*$16,300*

[a]Three persons (or 0.2 percent of the total sample) did not respond.
[b]Consist of relatives living together: married couple, with or without children; or a man or woman with children, or any other combination of relatives living together.
[c]An individual living alone or unrelated individuals living together.
[d]Twenty-two persons (or 1.8 percent of the total sample) did not respond.
[e]Fourteen persons (or 1.1 percent of the total sample) did not respond.
[f]Ninety-one persons (or 7.4 percent of the total sample) did not respond.

predominated. Such was also the case for both license holders and nonholders; however, a significantly larger proportion of households among license holders were the husband-wife type.

The differences in terms of age and sex of the householder were more pronounced and significant. Households of license holders were much more likely to be headed by younger persons -- about 42 percent had householders under thirty-five years of age and over 60 percent were under forty-five years of age, compared to only 30 percent and 46 percent, respectively, for nonholders. Households of nonholders, thus, were more likely to be headed by persons forty-five years of age and older. Age differences such as these, and those discussed in the previous section, should be of particular interest to DFWP personnel as they plan for the future. Changes in the age structure of the population may have implications for changes in the number of license holders.

Both groups of households were most likely to have male householders, but this was especially so among license holders -- 86 percent of their households had male householders, compared to 67 percent among nonholders; about a third of the households of nonholders were headed by females.

The household incomes reported for both groups also showed some significant differences, with those of license holders tending to be higher. The majority of households in each group had household incomes over $15,000 in 1979, but license holders had a significantly higher proportion in these upper income categories (about 67 percent compared to 54 percent for nonholders). Almost 30 percent of the nonholders had household incomes of $10,000 or less in 1979, compared to only 15 percent

among license holders. The estimated median (middle) household incomes show the differences somewhat more clearly: the estimated median for license holders was $19,000, compared to only $16,300 among nonholders. The larger proportions of one person households and households with older household heads may well have a lot to do with the relatively lower household incomes among nonholders.

Relating Characteristics of Montanans and Their Households to Outdoor Recreation

A knowledge of some of the characteristics of Montanans and their households and of DFWP license holders and nonholders provides a useful background in analyzing outdoor recreation in the state. The foregoing tables and discussion, for instance, have pointed to a population where households have been declining in size in most areas of the state; where most households are conventional husband-wife (family) types, but where another one-fourth are either one person households or are other family households headed primarily by unmarried persons. They indicate that Montanans change residence frequently -- almost one-third of the respondents lived in their current communities five years or less -- but that much of this movement is within the state.

Over half the respondents reported being DFWP license holders in 1979. These license holders tend to be younger than nonholders, with a median (middle) age of thirty-five years. While they are more likely than nonholders to be male, about 41 percent are female, and they are more likely to be employed. They tend to live in slightly larger households, with a younger householder (under forty-five years of age) and with higher household incomes.

Background information such as this may help to explain the outdoor recreation activity and preferences of Montanans and their opinions regarding various oudoor recreation issues as discussed in the previous chapters.

HIGHLIGHTS OF THE SURVEY

Outdoor Recreation Activities

.....Most Montanans devote some of their leisure time to outdoor recreation activity. Only 25 percent of the survey respondents indicated they do not usually participate in any such activity.

.....The most popular outdoor recreation activities in Montana in 1979 were among the most sedentary: picnicking, driving for pleasure, and walking for pleasure (as opposed to hiking or mountain climbing). Over 70 percent of the survey respondents reported doing each of these activities at least once in 1979.

.....Montanans who purchased some type of Department of Fish, Wildlife, and Parks (DFWP) license in 1979 (license holders) participated in outdoor recreation activities more frequently than did nonholders. In every activity category, license holders indicated greater participation.

.....Over 58 percent of the respondents reported fishing at least one day in 1979, and over 35 percent indicated they had hunted at least once that year. When asked how often they fished or hunted last year, the median (middle) number of days reported by those who fished was fourteen; the median reported by hunters was ten days.

.....Camping and hiking are also popular leisure time activities. About 58 percent of the respondents reported camping at least one day in 1979, and ten days was the median number recorded. Thirty-eight percent indicated they had hiked or mountain climbed, with six days the median number reported.

.....In most cases there were few statistical differences between the activity participation rates of those living in Montana's seven most populous counties (Butte-Silver Bow, Cascade, Flathead, Gallatin, Lewis and Clark, Missoula, and Yellowstone) and those residing in the remaining forty-nine counties.

.....In general, as might be expected, participation rates were greater among the younger age groups, especially for the more vigorous activities. Bicycling, for instance, is definitely an activity enjoyed by younger Montanans; over half of those between eighteen and twenty-four years of age reported some bicycling in 1979. Bird watching and nature study, driving or walking for pleasure, and picnicking were activities which showed high participation by those sixty-five years of age and older.

.....Respondents were asked how they think outdoor recreation services and programs in general should be paid for. Among those who did not buy licenses in 1979 (nonholders), 51 percent felt those who utilize the services should pay for the services by way of user fees.

License holders were less enthusiastic about fees: about 42 percent suggested them as a way of funding. Overall, 46 percent of all respondents recommended user fees, 28 percent said the services should be supported by state general tax funds, and 16 percent indicated that a combination of both funding sources should be used.

.....A significant proportion of respondents -- over 80 percent -- was satisfied with the programs now provided and did not feel that additional services or programs should be added or that any should be eliminated.

Park and Recreation Site Program

.....Of the 1,237 respondents surveyed, almost 80 percent reported visiting a state or federal park or recreation site in Montana within the past five years.

.....Forty-eight percent reported visiting a state-maintained park or recreation site at least once in 1979.

.....About 43 percent of the survey respondents indicated they usually notice if a recreation area is maintained by the state or by another government agency. Among just those who said they had visited a state or federal site in the last five years, about

54 percent indicated they usually notice if the area is maintained by the state.

.....Sixty-eight percent said there is a state park or recreation site within an hour's drive of their residence. However, of those, only 23 percent were able to accurately name the site (accuracy of the location was not checked). An additional 32 percent of those who mentioned a particular site did not use an accurate name.

.....Respondents were fairly evenly divided over whether the state should purchase land for new or expanded park and recreation areas, or whether there are enough sites available now. About 46 percent said the state should purchase new sites, and 44 percent indicated there are enough areas already available.

.....Fifty-one percent of the respondents identified state general tax funds as a major source of funding for park and recreation sites, and about 24 percent identified license fees and fines. In general, however, actual understanding of how these services are financed was limited; almost one-third of the respondents were unable to name any funding source.

.....Respondents were asked how well, in general, they felt the state does in maintaining its parks and recreation sites. About 20 percent said the state does a "very good job," and almost 57 percent indicated they thought the state does a "good job." Only about 2 percent felt that the state does a "poor job."

Fishing and the Fisheries Program

.....Montana fishermen overwhelmingly stated that they preferred to catch a few large fish rather than many small fish.

.....Survey respondents who resided in eastern Montana were more apt to favor development and expansion of a warm water fishing program than were those in western Montana.

.....Respondents strongly favored efforts by the state to maintain fish habitat and to control subdivision activities along rivers with high fishing, scenic, or recreational value. The overwhelming approval of this type of subdivision regulation must be interpreted with caution because the respondents may not have been equally informed about the topic and the intention was only to get a public reaction to the general idea.

.....When asked about who should control regulatory activities with respect to fishing habitat and the use of recreation waters, respondents always overwhelmingly said the State of Monana.

.....The majority of respondents indicated support for raising fishing license fees to cover the increasing cost of the current fisheries program.

Hunting and Wildlife Management Programs

.....Forty-eight percent of all survey respondents opposed limiting the number of resident hunters in Montana; about 37 percent said they were in favor of such a limit. Opposition to resident limits was strongest among hunters and in the western part of the state.

.....A limit on the number of nonresident hunters was overwhelmingly approved. More than 86 percent said they favored such a limit while only 10 percent were opposed.

.....Among those favoring the restriction of nonresident hunters, most preferred a lower limit than the current number of 17,000 nonresident big game licenses sold annually. Fifty-six percent preferred a lower figure, 32 percent preferred no change, and only 1 percent wanted an increase.

.....Of those favoring a lower limit on the number of nonresident licenses sold, 62 percent favored raising the resident license fee to make up for the revenue lost.

.....The respondents overwhelmingly opposed the idea of requiring a license to hunt small game animals. The opposition was greatest in the rural areas.

.....Respondents also opposed, by a ratio of about four to one, increased emphasis on and funding of a nongame wildlife program.

Related Issues Pertaining in General to Outdoor Recreation and DFWP

.....Ninety percent of the respondents said there were conflicts between private landowners and people who used their land for recreation purposes. About 78 percent thought the problems were "very serious" or "serious."

.....Almost 23 percent of the survey respondents said they owned land that is or could be used for hunting, fishing, or other forms of recreation. More than half of these landowners said they had encountered friction or problems with recreationists regarding access to or through their land.

.....Expanded efforts to negotiate long-term easements across private lands in order to reach public lands received the overwhelming support of the respondents; 75 percent favored such a program. And, more than half the respondents said such an easement program should be in addition to other land programs, rather than a replacement for other programs.

.....In general, respondents tended to favor multiple use of Motnana's water. Only 8 percent of the respondents said that fish and wildlife should have the highest priority in water use. Almost 42 percent felt that agriculture should also receive first priority along with fish and wildlife. About 36 percent felt water should be equally available for all uses, including industrial uses.

.....Respondents overwhelmingly stated that the Department should be involved in the state's decisions concerning energy-related activities in order to assure consideration of fish and wildlife habitat. Eighty-three percent favored that involvement.

.....The majority of respondents indicated that the Department's enforcement activities are adequate now. Increased enforcement activity received the most support from hunters and fishermen, and the most avid participants in these activities tended to most strongly favor increased enforcement efforts.

.....Respondents were given several approaches as to how the Department could expand its enforcement effort without hiring more enforcement personnel. They clearly preferred that more emphasis be placed on reporting of violations by the public. More than 40 percent of the respondents, and about half of the hunters surveyed, favored increased public involvement in the reporting of violations.

.....The respondents overwhelmingly approved of a toll-free telephone number for the public's use in reporting violations or problems; however, only about 21 percent were aware that one already exists (the "Report Line").

.....Montanans tend to rely on "word of mouth," newspapers, magazines, and television for information regarding outdoor recreation and related issues. Further, about 36 percent cited word of mouth as the source in which they placed the most confidence, followed by newspapers (cited by 15 percent).

.....A significant majority of respondents felt that the overall performance of the Department of Fish, Wildlife, and Parks is "good" or "excellent." Seventy-one percent rated it as "good," and 11 percent described it as "excellent." Only 13 percent responded by saying "fair" or "poor" (barely 2 percent said "poor").

Characteristics of Montanans and Their Households
As Revealed by the Survey

.....About 31 percent of the respondents had lived in their current communities five years or less; a little over half of those relative newcomers had moved from other places in Montana.

.....Fifty-nine percent of the respondents indicated they were holders of a Department of Fish, Wildlife, and Parks license.

.....License holders tended to be younger than nonholders; their estimated median (middle) ages were thirty-five years and forty-two years, respectively.

.....License holders were more likely to be male, to be household heads, and to be employed than were nonholders.

.....Compared to the households of nonholders, the households of license holders were more likely to be multiperson households with a male householder (head of household), and they had a median (middle) household income of $19,000 in 1979. Conversely, households of nonholders were more likely to be smaller (one or two persons), and they had a median household income of $16,300 in 1979.

.....Overall, the survey sample appears to be representative of the resident population of Montana (as documented in Appendix B).

APPENDIX A

METHODOLOGY

This survey was conducted among Montana residents (adults eighteen years of age and older) during a six-week period commencing in May 1980. The eligible (adult) population was estimated at 546,000 residents, from which a minimum 1,200 interviews were to be obtained.

The survey was designed for telephone administration, rather than the personal or mail approach. Personal interviews are very expensive, given the time and travel involved, especially for a statewide survey. Also, there are no reliable and adequate lists of all Montana households or residents from which to select a representative sample for personal or mail contact. For primarily these reasons, the Bureau of Business and Economic Research, in 1978, designed a program to generate random telephone numbers for Montana and substate areas. This program utilizes a random digit dialing (RDD) technique for sample selection. The RDD technique is superior to the use of the telephone directory because it does not exclude households with unlisted telephones, and the actual sample selection can be facilitated considerably by computer techniques.

The sample frame resulting from use of the RDD technique approximates the current mix of households covered by the various telephone companies in the state as well as the geographic distribution of those households. (The geographic distribution of the sample for this study is discussed in

Appendix B.) Of course, while even this approach does not assure 100 percent coverage, it is felt that any biases due to coverage problems do not significantly distort the results for the purposes of this type of study for at least two reasons. First of all, as recently as 1977, the U.S. Federal Communications Commission reported that no less than 96 percent of the households in the United States had telephones in their own homes; more locally, the FCC has reported that about 95 percent of Montana's households have telephone coverage.[1] In addition, while there are some without telephones, such households or persons usually cannot be reached by personal or mail survey methods either--they tend to be more transient and/or socially isolated and are difficult to reach regardless of the method used.[2]

Therefore, for the reasons stated and because this particular telephone approach, utilizing RDD sample selection techniques, has worked well in past studies, this project was designed for telephone administration.

However, because the initial sample units generated by the RDD procedure were households rather than individual residents, a second random selection procedure was used to select the individual respondents from among the eligible adults living in the various households: in their initial contacts with the households, the interviewers determined the

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[1]U.S. Department of Commerce, Bureau of the Census, *Statistical Abstract of the United States, 1979* (Washington, D.C., 1979), table 975; citing U.S. Federal Communication Commission, *Statistics of Communications Common Carriers*.

[2]William R. Klecka and Alfred J. Tuchfarber, "Random Digit Dialing: A Comparison to Personal Surveys," *Public Opinion Quarterly*, vol. 42, no. 1 (Spring 1978), p. 106.

composition of each; then a respondent was selected from among the eligible adults in each household using a specific random selection procedure.[3] These various random sampling procedures were followed so as to ensure that every person had a chance to be selected and to ensure that the sample was representative of the Montana population from which it was drawn. (The sample is discussed in more detail in Appendix B.)

During the data collection period, about 3,600 randomly selected telephone numbers were attempted. About 1,900 of these were ineligible numbers; they included primarily nonworking or unassigned numbers, as well as nonresidential numbers and "no contacts" (no contact was made after at least five varied attempts). Of the approximately 1,700 persons subsequently selected at random from the eligible households, about 73 percent responded, resulting in 1,237 usable interviews. This response rate compares quite favorably with surveys of this type.

The size of the survey sample assures that the overall survey results are within plus or minus 4.3 percentage points of the "true" value (i.e., the result that would be obtained by interviewing <u>all</u> households in the state) at a confidence level of 99 percent. To illustrate what this means, had it been determined that 40 percent of the sample had lived in their current communities less than five years, it could then be assumed with 99 percent certainty that the true value lay between 35.7 and 44.3 percent (40 percent $\pm$ 4.3 percent).[4]

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[3] The interviewers rotated systematically among eight varying random selection tables which, used together, are designed to generate a sample that is representative of the population from which it is drawn.

[4] If we assume a slightly lower confidence (or certainty) level of 95 percent, the reliability (or confidence interval) is increased to 2.8 percentage points: that is, we can assume with 95 percent certainty that the overall survey results are within plus or minus 2.8 percentage points.

The relatively smaller number of respondents in the various geographic categories (counties, population size groups, and regions), however, do not assure the same very high level of confidence as is the case for the entire statewide sample.[5] Nevertheless, in most instances, the confidence levels are quite reasonable, and any statistically significant differences among the areas are noted in the text.

Increased sample size, of course, would have reduced the limits of sampling error. However, the reduction would have been small in relation to any practicable increase in sample size, and the effect would have been to increase costs and time without great benefits in meeting the objectives of the survey.

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[5]For example, for the seven largest counties, as a whole, and the remaining forty-nine counties, as a whole: with a 95 percent level of confidence, the confidence intervals are $\pm$ 3.7 and $\pm$ 4.4 percentage points, respectively. Among the seven regions: with a 90 percent confidence level, the confidence intervals range from $\pm$ 3.0 percentage points (region 4) to $\pm$ 5.0 percentage points (region 7).

APPENDIX B

THE SAMPLE

The final sample included 1,237 persons, aged eighteen years and older, residing in Montana at the time of the survey. The geographic distributions of the survey sample are presented in table B.1. The first distribution presents data for the seven largest counties (the predominantly urban counties of the state) and for the remaining forty-nine smaller (and predominantly rural) counties, as a whole. The second distribution presents the data for the seven administrative regions of the Department of Fish, Wildlife, and Parks (see figure B.1).

Table B.2 summarizes the various demographic characteristics of the survey sample (respondents). The majority of the respondents were between eighteen and forty-four years of age, with an estimated median age of thirty-eight years, and a little over half were female. The majority (54 percent) had lived in Montana over ten years. The respondents tended to be well educated: 41 percent had completed high school and another 45 percent had completed some college or more. Most of the respondents indicated that they were householders (household heads) or shared that status with a spouse or other household member, and most were employed, predominantly as private sector workers. Almost half the respondents reported total household incomes between $15,000 and $35,000 in 1979, while 38 percent reported household incomes below $15,000 and 12 percent reported incomes above $35,000. Respondents were also asked whether they

Table B.1

Distribution of Survey Sample, by Residence

	Percentage of Total	*Number of Respondents*
All respondents	100	*1,237*
Residence, by county size[a]		
Seven largest counties	58	*717*
Butte-Silver Bow	5	*56*
Cascade	11	*135*
Flathead	5	*65*
Gallatin	7	*84*
Lewis and Clark	6	*71*
Missoula	11	*131*
Yellowstone	14	*175*
All other counties	42	*520*
Residence, by DFWP region		
Region 1	10	*122*
Region 2	17	*212*
Region 3	16	*195*
Region 4	23	*285*
Region 5	18	*220*
Region 6	8	*104*
Region 7	8	*99*

Note: Percentage detail may not add to total due to rounding.

[a]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

Figure B.1

Montana Department of Fish, Wildlife, and Parks
Administrative Regions

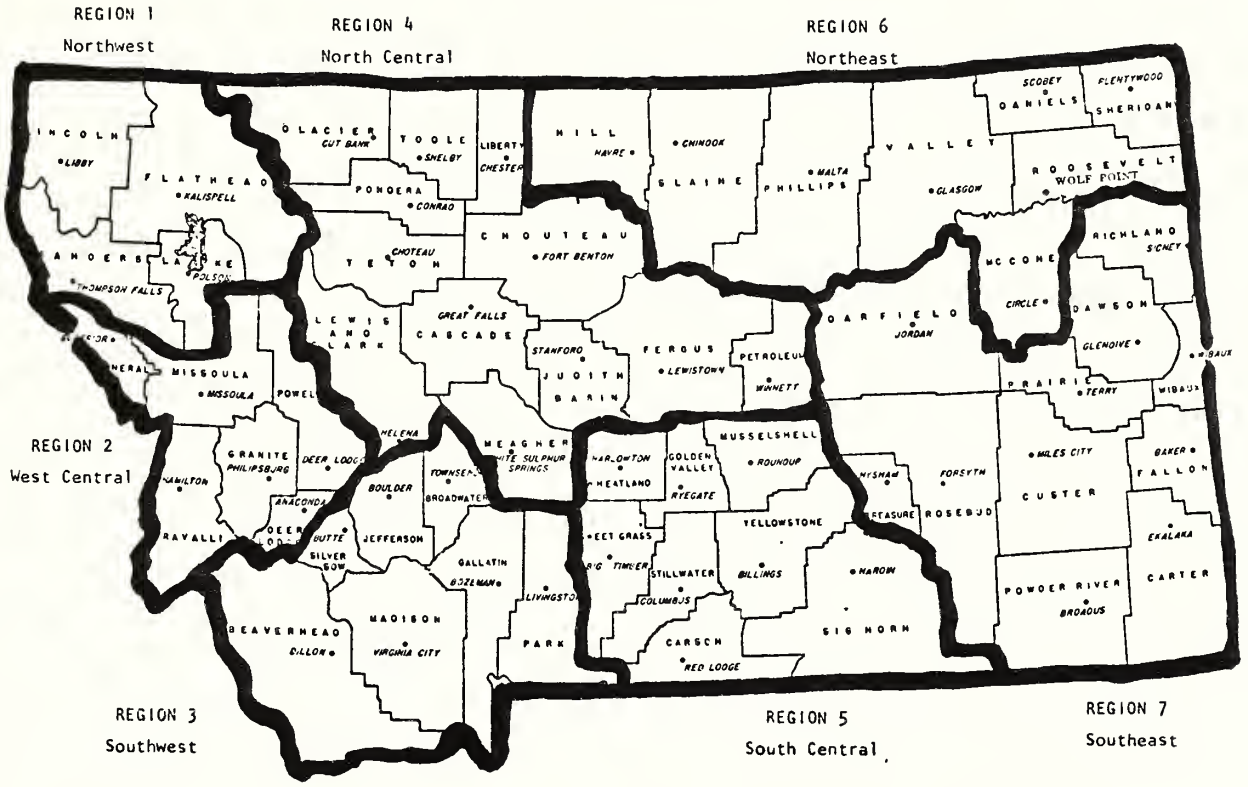


Table B.2

Characteristics of the Survey Sample

	Percentage of Total		*Number of Respondents*
All respondents	NA		*1,237*
Age of respondent:[a]	100		*1,232*
18-24 years	16		*197*
25-34 years	29		*355*
35-44 years	18		*221*
45-64 years	24		*299*
65 years and over	13		*160*
Estimated median age (in years)		*38*	
Sex or respondent:	100		*1,237*
Male	46		*564*
Female	54		*673*
Length of residence in current place:	100		*1,235*
1 year or less	10		*118*
2- 5 years	21		*265*
6-10 years	15		*190*
Over 10 years	54		*662*
Highest level of formal education:[a]	100		*1,232*
Some high school or less	13		*161*
High school graduate[c]	41		*506*
Some college	23		*289*
College graduate	22		*276*
Estimated median school years completed		*12.9*	
Householder (head of household) status:[d]	100		*1,225*
Householder (head of household)[e]	61		*750*
Not householder	39		*475*
Employment status:[b]	100		*1,235*
Employed	67		*833*
Unemployed and looking for work	3		*38*
Not in the labor force	30		*364*
Employed persons, by type of worker:[f]	100		*820*
Private sector workers	58		*475*
Government workers	21		*176*
Self-employed persons	21		*169*
Household income in 1979:[g]	100		*1,146*
$ 5,000 or less	7		*84*
$ 5,001 to $10,000	13		*153*
$10,001 to $15,000	18		*201*
$15,001 to $20,000	19		*220*
$20,001 to $35,000	31		*351*
Over $35,000	12		*137*
Estimated median household income		*$18,100*	
License holder status:	100		*1,237*
Montana DFWP license holder	59		*730*
Nonholders	41		*507*

Note: Percentage detail may not add to total due to rounding.
NA denotes not applicable.
[a]Five persons (or 0.4 percent of the total sample) did not respond.
[b]Two persons (or 0.2 percent of the total sample) did not respond.
[c]Includes those with formal technical training beyond high school but not at a junior college or four-year college.
[d]Twelve persons (or 1.0 percent of the total sample) did not respond.
[e]Includes those who said they sahre householder (or head of household) status with a spouse or other household member.
[f]Thirteen employed persons (or 1.1 percent of the total sample) did not respond.
[g]Ninety-one persons (or 7.4 percent of the total sample) did not respond.

had purchased a license from the Department for 1979; about 59 percent reported being license holders.

Unfortunately, there are limited demographic data available for comparisons of the survey sample (respondents) with the actual population. However, where such data are available, as presented in table B.3, the survey sample compares quite favorably.

As the data indicate, the geographic distribution of the survey sample compares favorably with current distribution of the population in the state. The smaller (rural) counties, as a whole, are only slightly under-represented. This is primarily due to the extent of telephone coverage in the state--urban areas generally have slightly higher telephone coverage. However, the differences between the two are not significant.

Distribution of the sample based on sex, employment status, and type of employed worker also compare very favorably, with no significant differences indicated. Only in one instance--in terms of age, specifically in the 18-44 age group--does the difference between the sample and the population appear to be somewhat significant. Nevertheless, this one difference is not considered significant enough to distort the results, especially since, overall, the sample compares very favorably and thus is representative of the population.

Table B.3

Comparison of Survey Sample and the Montana Population

(In Percentages)

	Survey Sample	Montana Population[a]
Residence, by county size[b]	100	100
Seven largest counties	58	56
Butte-Silver Bow	5	5
Cascade	11	10
Flathead	5	7
Gallatin	7	5
Lewis and Clark	6	5
Missoula	11	10
Yellowstone	14	14
All other counties	42	44
Residence, by DFWP region:	100	100
Region 1	10	12
Region 2	17	16
Region 3	16	15
Region 4	23	23
Region 5	18	18
Region 6	8	8
Region 7	8	8
By age:	100	100
18-44 years	63	56
45-64 years	24	29
65 years and over	13	15
By sex:	100	100
Male	46	49
Female	54	51
By employment status:	100	100
Employed	67	64
Unemployed and looking for work	3	3
Not in the labor force	30	33
Employed persons, by type of worker:	100	100
Private sector workers	58	62
Government workers	21	23
Self-employed persons	21	15

Note: Percentage detail may not add to total due to rounding.
[a]Sources of the various comparison data are as follows: (1) residence, sex--U.S. Bureau of the Census, unpublished data; (2) age--U.S. Bureau of the Census, *Current Population Reports*, Series P-25, no. 875; (3) employment status--Montana Department of Labor and Industry, Employment Security Division, *Montana Employment and Labor Force* (February 1980); and (4) employed persons by type of worker--U.S. Bureau of Economic Analysis, Regional Economics Information System, unpublished data (April 1980).
[b]The seven largest counties had populations over 30,000 in 1980; all other Montana counties had fewer than 25,000 residents each.

APPENDIX C

COVER SHEET AND QUESTIONNAIRE

Bureau of Business and Economic Research
University of Montana
Missoula, Montana 59812
(406) 243-5113

DFWP
1980

COVER SHEET

SAMPLE: 1 2

TELEPHONE NUMBER: [ ]

INTERVIEWER ID NUMBER: [ ]

CONTACT RECORD (ATTEMPTS TO CONTACT RESPONDENT):

Contact no.	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*
Date								
Day of week								
Time of day								
Result								
Interviewer's initials								

APPT: _____ _____ _____ _____
DAY *DATE* *TIME* *NOTES*

APPT: _____ _____ _____ _____
DAY *DATE* *TIME* *NOTES*

* * * *

1. Hello, my name is _____. I'm calling from the University of Montana (here) in Missoula. We are currently working on a statewide survey on outdoor recreation issues for the Bureau of Business and Economic Research.

First of all, I need to be sure I've dialed the right number.

Is this *(insert telephone number)* ?

YES → NO → *END CONTACT:* I'm sorry -- please excuse the ring.

2. Since this telephone number has been generated by a computer, I don't know whether it's for a business or a home. (Which is it?)

1. BUSINESS → 2. HOME *GO TO 3* → 3. BOTH *GO TO 3*

2a. Does anyone live there on the premises?

1. YES → 2. NO → *END CONTACT:* I won't take any more of your time, since only residences are to be interviewed. Thank you -- goodbye.

2b. Is this number used for personal business too, or is there another phone number for the residence?

1. USE THIS PHONE → 2. HAVE OTHER PHONE → *END CONTACT:* I won't take any more of your time, since only residential listings are eligible for this survey. Thank you -- goodbye.

3. In order to do the interview, I have to (follow a specific sampling procedure we've been given to) determine which member of the household is to be interviewed. I'll need a listing of all the people living in your household -- not their names, just their sex and age and relationship to you.

Let's start with you -- how old are you? (Are you male or female?) *(Record age and sex for INFORMANT in appropriate grid, based on informant's age, on page 3.)*

3a. Now I'd like the age and sex and relationship to you of each of the other members of your household who are 18 years of age or older. *(Record in first grid on page 3.)*

List all household members 18 years and older by their relationship to INFORMANT:

(A) HOUSEHOLD MEMBERS BY RELATIONSHIP TO INFORMANT	(B) SEX	(C) AGE	(D) PERSON NUMBER	(E) RESP AND HSHLD HEAD

R = RESPONDEN
H = HEAD OF HOUSEHOLD

3b. Now I'd like the sex and age and relationship to you of each of the members of your household who are 17 or younger.

	SEX	AGE

3c. You've said there are *(repeat listing of persons in both grids)* -- does that include everyone living there at the present time? *(If NO, correct grid.)*

3d. And which person is the head of the household? ((X) Who is the chief wage earne
(Record as "H" in column E of grid.)

Now I will use a selection procedure -- I'm going to number the eligible people in your household to determine who we need to interview. (It will just take a second . .)

The total number of eligible persons is _____,

so I am to interview person number _____ who is

(relation to Informant)

(SEE PAGE 4 FOR RESPONDENT SELECTION INSTRUCTIONS.)

BEGIN INTERVIEW WITH R, IF POSSIBLE. OTHERWISE, MAKE AN APPOINTMENT TO CALL BACK LATER.

SELECTION TABLE B_1

If the number of eligible persons is:	*Interview the person numbered:*
1	1
2	1
3	1
4	1
5	2
6 or more	2

INSTRUCTIONS FOR SELECTING RESPONDENT:

(A), (B), (C): Record the information provided by the Informant about the household members. List Informant in appropriate grid based on his/her age (if 18 or older, list in first grid; if 17 or younger, list in second grid).

(D): Assign the number "1" to the oldest male, number "2" to the next oldest male, and so on until all the eligible males (18 or older) are numbered. Then continue the number sequence with the eligible females, numbering them from the oldest to the youngest (the oldest female gets the next number after the youngest eligible male, etc.).

NOTE: Only persons 18 or older are eligible and, thus, are to be numbered. This includes the Informant. If Informant is 17 or younger and is listed in the first grid by mistake, the listing can be corrected during editing but do not include him/her in assigning numbers.

(E): Use the selection table on page 3 (lower right corner) to determine the number of the person to be interviewed.

In the first column of the selection table, circle the number of eligible persons (age 18 or older) in the household -- that should be the highest number assigned in column (D) of the first grid.

The corresponding number in the second column of the selection table denotes the person to be interviewed. In column (E) of the grid, record the letter "R" to identify the Respondent.

* * * *

QUESTIONNAIRE NO.

Office Use Only

Bureau of Business and Economic Research
University of Montana
Missoula, Montana 59812
(406) 243-5113

DFWP
1980

SAMPLE CODE: 1 2

TELEPHONE NUMBER: _____

DATE OF INTERVIEW: _____

INTERVIEWER ID NUMBER: _____

TIME OF INTERVIEW (approximate): _____

LENGTH OF INTERVIEW (minutes): _____

A1. HOUSEHOLD MEMBERS *(Record the same information recorded in the two household grids on page 3 of the Cover Sheet.)*

(A) HOUSEHOLD MEMBERS BY RELATIONSHIP TO INFORMANT	(B) SEX	(C) AGE	(E) RESP AND HSHLD HEAD

R = RESPONDENT
H = HEAD OF HOUSEHOLD

INTRODUCTION *(Use only if necessary -- e.g., if Respondent was not Informant.)*

Hello, my name is _____. I'm calling from the University of Montana (here) in Missoula. We are doing a statewide survey on outdoor recreation issues for the Bureau of Business and Economic Research.

GO TO STATEMENT A2 WITHOUT HESITATING

A2. *INTERVIEWER: THE FOLLOWING MUST BE READ TO RESPONDENT*

Before we start, I would like to assure you that this interview is completely confidential and voluntary. If we should come to any question that you don't want to answer, just let me know and we'll go on to the next question.

EXACT TIME NOW:

A3. What is the name of the city, town, or community you live in? *(Record below.)*

IF R SAYS NOT LIVING IN CITY OR TOWN:

(X) What city or town do you live closest to?

_____

NAME OF CITY, TOWN, ETC.

A4. Do you (and your family) live there all year long or do you have another residence for some part of the year?

1. HERE ALL YEAR
GO TO A5

2. HAVE ANOTHER RESIDENCE

A4a. On the average, how many months a year do you live there? MONTHS: _____

ASK ONLY IF SIX (6) MONTHS OR LESS:

A4b. Where is your usual place of residence?

CITY AND STATE: _____

A5. About how long have you lived in the *(place recorded in A3, page 2)* area?

_____ YEARS OR _____ MONTHS OR _____ DAYS

ASK ONLY IF TEN (10) YEARS OR LESS:

A5a. Where were you living before this? _____

LOCATION: CITY AND STATE

A6. Is this telephone number listed in the current telephone book?

1. YES
TURN TO B1 ON P. 4

2. NO

3. DON'T KNOW

A6a. Is the listing too new to be in the book, was an unlisted number requested, or is there some other reason that the number may not be listed?

1. LISTING TOO NEW

2. REQUESTED THE UNLISTED NUMBER

3. OTHER *(Specify)*: _____

B1. Where do you usually pick up information about fish and wildlife, the outdoors, or outdoor recreation -- from television, radio, newspapers, magazines, newsletters or other printed materials, from friends or other community members, or what?

_____

_____

_____

B1a. Are there any other sources of information you usually use?

_____

_____

_____

B1b. Of the sources you mentioned, which one do you place the most confidence in?

_____

_____

B2. Now I have a question about what you do when you're not working or when you're on vacation -- that's the leisure time you have for hobbies and recreation, both indoors and outdoors.

What two or three things do you usually do in your leisure time?

(1) _____

(2) _____

(3) _____

B3. Now I'm going to read a list of outdoor recreation activities. Please tell me about how many days you did each one in 1979 in Montana. *(Begin with activity marked and continue through the list, ending with the activity, if any, just above the one marked. Read only the activities, not the preceding letters.)*

		NUMBER OF DAYS
A.	Back country touring with a four-wheel drive vehicle	_____
B.	Bicycling	_____
C.	Bird watching or nature study	_____
D.	Boating with a motor. . .	_____
E.	Camping	_____
F.	Cross-country skiing. . .	_____
G.	Driving for pleasure or sightseeing	_____
H.	Fishing	_____
I.	Hiking or mountain climbing	_____
J.	Horseback riding . . .	_____
K.	Hunting.	_____
L.	Motor bike riding. . .	_____
M.	Outdoor swimming or going to a lake or river	_____
N.	Picnicking	_____
O.	Playing outdoor games	_____
P.	River floating or canoeing	_____
Q.	Snowmobiling	_____
R.	Walking for pleasure or sightseeing	_____

- -

T.	_____	_____
U.	_____	_____
V.	_____	_____

B3a. Are there any other outdoor recreation activities you did in Montana in 1979 that I didn't mention? *IF YES: Ask the following, if necessary, and record on lines T, U, V above.*

B3b. Which ones?

B3c. About how many days did you *(activity mentioned)* in 1979? *(Ask for each additional activity mentioned.)*

B3d. Did you use any logging roads for any outdoor recreation activity or to gain access to any areas?

1. YES	2. NO	3. DON'T KNOW

B4. Are there any outdoor recreation activities you wish you could do in Montana that you don't do for one reason or another?

1. YES → *(GO TO B4a)*

2. NO → *GO TO B5*

B4a. What are the main things that keep you from doing these things?
IF FEWER THAN FOUR: (X) Are there any other reasons?

(1) _____

(2) _____

(3) _____

(4) _____

B5. What if fuel costs continue to rise or if fuel is not readily available when you want it -- would this affect your outdoor recreation activity or would you expect it to have no effect on you?

1. WOULD AFFECT ME → *(GO TO B5a)*

2. NO EFFECT → *GO TO B6 ON PAGE 7*

B5a. How would your activity be affected or changed? For example, some people might try to stay closer to home for their outdoor recreation; or they might engage in fewer outdoor recreation activities in general, or in activities that don't require the use of fuel.

In what ways would your outdoor recreation most likely be affected or changed?

[ ] STAY CLOSER TO HOME

[ ] FEWER ACTIVITIES IN GENERAL

[ ] ACTIVITIES NOT USING FUEL

_____

_____

_____

_____

(X) Any other changes? *(Record above)*

B6. Generally speaking, how do you think outdoor recreation services and programs should be paid for -- by charging fees to those who use the services or programs, or by using general tax funds paid by all Montana taxpayers, or something else?

1. USER FEES

2. GENERAL TAX FUNDS

3. OTHER *(Specify)* _____

_____

B7. Are there any particular outdoor recreation services or programs you feel should be provided that are not provided now?

1. YES

2. NO → *GO TO B8*

3. OTHER *(Specify)* _____

B7a. Which ones?

(1) _____

(2) _____

(3) _____

B8. And are there any outdoor recreation services or programs now provided that you feel should be <u>eliminated</u>?

1. YES

2. NO → *GO TO C1 ON PAGE 8*

3. OTHER *(Specify)* _____

_____

GO TO C1 ON PAGE 8

B8a. Which ones?

(1) _____

(2) _____

(3) _____

C1. The State of Montana maintains a statewide system of park and recreation sites. There are also many sites in the state that are managed by the federal government.

Have you visited any state or federal park or recreation sites in Montana in the last five years or so?

1. YES

2. NO → *GO TO C4*

C2. What about just during 1979 -- how many times did you visit a state or federal site last year?

NUMBER OF VISITS: _____

NONE
GO TO C3

C2a. About how many of these visits were just to areas maintained by the state?

VISITS TO "STATE" SITES: _____

DON'T KNOW

C3. Generally speaking, would you say that you usually notice when you're visiting a state site rather than some other public site, or would you say you usually do not notice?

1. USUALLY NOTICE

2. USUALLY DO NOT NOTICE

3. OTHER *(Specify)* _____

C4. Based on what you've seen or heard, what is your general feeling about how well the state maintains its parks and recreation sites -- overall, would you say the state does a very good job, a good job, a fair job, or a poor job?

1. VERY GOOD

2. GOOD

3. FAIR

4. POOR

C5. Thinking ahead to the next five to ten years, do you think the state should be purchasing land for new or expanded sites around the state, or do we have enough sites already?

1. SHOULD PURCHASE	2. HAVE ENOUGH ALREADY	3. OTHER *(Specify)* _____
GO TO C6		

C5a. Why do you say that? _____

_____

_____

C6. If additional recreation sites are developed, do you feel they should mostly be closer to the larger population areas, or mostly in less-populated areas, or what?

1. CLOSER TO LARGER POPULATION AREAS

2. IN LESS-POPULATED AREAS

3. OTHER *(Specify)* _____

C7. There are several kinds of recreation sites available for public use. Some of these are: camping and picnic sites; "snow park" areas; historical and cultural parks; game ranges; waterfowl areas; and access areas for fishing, hunting, snowmobiling, motorbiking, cross-country skiing, and so on.

If additional sites are provided, what kind or kinds of sites would you prefer? *(Record all mentioned.)*

[ ] A. CAMPING AND PICNIC SITES

[ ] B. "SNOW PARK" AREAS

[ ] C. HISTORICAL AND CULTURAL PARKS

[ ] D. GAME RANGES

[ ] E. WATERFOWL AREAS

ACCESS AREAS FOR:

[ ] F. FISHING

[ ] G. HUNTING

[ ] H. SNOWMOBILING

[ ] J. MOTORBIKING

[ ] K. CROSS-COUNTRY SKIING

[ ] OTHER *(Specify)* _____

C8. Are there any state park or recreation sites near where you live -- say, within fifty (50) miles or within about an hour's drive?

1. YES

2. NO → *GO TO C9*

3. DON'T KNOW → *GO TO C9*

C8a. What is the name of the site or sites? _____

_____

_____

C9. As far as you know, where does the state get most of its money to operate its system of park and recreation sites -- what are the major funding sources? *(All are Montana sources except D.)*

[ ] A. BOAT AND SNOWMOBILE GAS TAXES

[ ] B. STATE GENERAL FUND (STATE INCOME TAX)

[ ] C. HUNTING AND FISHING LICENSES, FINES, ETC.

[ ] D. FEDERAL FUNDS (LAND AND WATER CONSERVATION FUNDS, ETC.)

[ ] E. COAL TAX AND MATCHING FUNDS

[ ] F. REVENUE EARNED FROM THE STATE PARKS

[ ] G. BOAT AND SNOWMOBILE LICENSES

H. _____

I. _____

J. _____

[ ] DON'T KNOW

Now I have a few questions about fish and wildlife resources in Montana. Some of these questions use the terms "habitat," "game," and "nongame." We are using the term "habitat" to refer to the natural area or environment in which fish or wildlife are commonly found and where people can hunt and fish. The term "game" refers to fish or wildlife that are hunted, while "nongame" refers to fish or wildlife that usually are not hunted.

D1. Adequate habitat is necessary to maintain fish population and quality fishing in Montana. To obtain this, the state has been involved in efforts to maintain minimum amounts of water in the streams, to keep the stream channels from being changed, and to keep the streams unpolluted.

In general, would you say you favor or oppose such efforts by the state?

1. FAVOR	2. OPPOSE

3. OTHER *(Specify)* _____

D2. How do you feel about subdivision activities along rivers that have high fishing, scenic, or recreational value -- do you think these subdivision activities should or should not be controlled in some way?

1. SHOULD BE CONTROLLED	2. SHOULD NOT BE CONTROLLED	3. OTHER *(Specify)* _____

GO TO D3 ON PAGE 12

D2a. Who should be responsible for controlling these activities -- the State of Montana, the federal government, or what?

1. STATE OF MONTANA	2. FEDERAL GOVERNMENT

3. OTHER *(Specify)* _____

D3. The state maintains many fishing access sites around the state. Thinking ahead to the next five to ten years, do you think the state should be obtaining more sites or are there enough already?

1. OBTAIN MORE

2. ENOUGH ALREADY

3. OTHER *(Specify)* _____

D4. Fishing license fees, of course, are used for the fisheries program. As the costs of this program rise, should there be an increase in the fishing license fees charged to those who use the program, or should the funding come from some other source?

1. INCREASE FISHING LICENSE FEES

2. OTHER SOURCE (Ⓧ What would you suggest instead?) _____

_____

_____

D5. As it is now, the fisheries program is also heavily financed by hunting fees. How do you feel about the idea of increasing fishing license fees to fully pay for the fisheries program -- do you favor this, are you opposed, or what?

1. FAVOR

2. OPPOSE

3. OTHER *(Specify)* _____

_____

D6. Some Montana rivers and streams are used heavily for fishing and for related recreation such as canoeing and floating. How would you feel about controlling or scheduling the use of these waters during periods of high use -- would you favor this, oppose it, or what?

1. FAVOR

2. OPPOSE → *GO TO D7*

3. OTHER *(Specify)* _____

D6a. What about issuing permits to fish or float in such waters -- would you favor this approach, oppose it, or what?

1. FAVOR PERMIT APPROACH

2. OPPOSE PERMITS

3. OTHER *(Specify)* _____

_____

D7. Now, suppose such river regulations did become necessary -- would you prefer that the regulations be administered by the State of Montana, by the federal government, or what?

1. STATE OF MONTANA

2. FEDERAL GOVERNMENT

3. OTHER *(Specify)* _____

D8. Do you ever do any fishing in Montana?

1. YES

2. NO → *GO TO E1 ON PAGE 16*

D9. Where do you prefer to fish most of all -- in streams, rivers, lakes, reservoirs, or elsewhere?

1. STREAMS

2. RIVERS

3. LAKES

4. RESERVOIRS

5. OTHER *(Specify)* _____

D10. Given the choice, would you rather catch more fish or would you rather catch fewer but larger fish?

1. MORE FISH

3. OTHER *(Specify)* _____

GO TO D11

2. FEWER BUT LARGER FISH

D10a. Would you favor or oppose fishing regulations that would result in fewer but larger fish being available?

1. FAVOR

2. OPPOSE

3. OTHER *(Specify)* _____

D11. Most of the emphasis in the state's fisheries program has been on cold water or trout fishing, with little emphasis on warm water fish, such as walleye, northerns, perch, bass, and crappies. Do you think the state should or should not put more emphasis on warm water fishing than it has in the past?

1. SHOULD EMPHASIZE MORE

2. SHOULD NOT

GO TO E1 ON PAGE 16

D11a. Would you favor or oppose an increase in fishing license fees in order to expand the warm water program?

1. FAVOR INCREASED FEES

2. OPPOSE INCREASED FEES

3. OTHER *(Specify)* _____

D11b. How would you feel if the cold water trout program had to be reduced in order to expand the warm water program -- would you favor expansion of the warm water program in this situation, would you oppose it, or what?

1. FAVOR EXPANSION	2. OPPOSE EXPANSION

3. OTHER *(Specify)*_____

E1. What are your feelings about the practice of paid hunting or fishing on private lands -- that's where the public pays the private landowners to hunt or fish on their lands during the regular hunting and fishing season? Generally speaking, do you approve of this practice, do you disapprove, or what?

1. APPROVE	2. DISAPPROVE

3. OTHER *(Specify)* _____

E2. Do you think the state should or should not encourage this practice in order to increase the hunting and fishing opportunities in the state?

1. SHOULD ENCOURAGE PRACTICE	2. SHOULD NOT

3. OTHER *(Specify)* _____

E3. When the state purchases land for wildlife management purposes, hunting is often allowed but most other uses are excluded or seriously limited. How do you feel about the state continuing to obtain land for such purposes -- generally speaking, do you favor this, are you opposed, or what?

1. FAVOR	2. OPPOSE

3. OTHER *(Specify)* _____

E4. In order to cover the increasing costs of Montana's wildlife management and hunting program, do you think the state should increase the fees paid by those who buy hunting licenses, or should it be financed another way?

1. INCREASE HUNTING FEES

OTHER (X What should be done?) _____

_____

_____

GO TO E5

E4a. Which hunting fees should be increased -- resident fees, nonresident fees, or both?

1. RESIDENT FEES ONLY

2. NONRESIDENT FEES ONLY

3. BOTH

E5. The number of Montana residents who hunt is increasing, but there are limits on the amount of game available. This might mean that fewer hunters will be able to take any game. If you had to choose, would you rather leave things as they are knowing each hunter will be less likely to take any game? Or, would you prefer that the state limit the number of resident hunters allowed so each has a better chance?

1. LEAVE AS IS

2. LIMIT NUMBER OF RESIDENT HUNTERS

3. OTHER *(Specify)* _____

_____

_____

E6. How do you feel about limiting the number of out-of-state hunters allowed in Montana -- do you think there should be a limit on the number of nonresident hunters, or should there be no limit at all?

1. LIMIT NONRESIDENT HUNTERS

2. NO LIMIT → *GO TO E7*

E6a. At the present time, no more than 17,000 nonresident big game hunters can be licensed each year. Do you think this number should be lower, should it be higher, or should it be left as is?

1. LOWER (FEWER)

2. LEFT AS IS → *GO TO E7*

3. HIGHER (MORE) → *GO TO E7*

E6b. If the state reduces the number of nonresident hunters allowed, do you think the resident hunting fees should or should not be increased to help make up for the lost revenue?

1. SHOULD BE INCREASED

2. SHOULD NOT

3. OTHER *(Specify)* _____

_____

E7. Nonresident hunting fees currently provide about two-thirds of the funding for the Montana Department of Fish, Wildlife, and Parks. In order to generate more funds, do you think the state should be allowed to sell more nonresident hunting licenses, should it increase the nonresident hunting fees, or what?

1. SELL MORE NONRESIDENT HUNTING LICENSES

2. INCREASE NONRESIDENT HUNTING FEES

3. DO BOTH

OTHER *(Specify)* _____

_____

E8. Some states require a license for hunting small animals, such as rabbits, ground squirrels, and raccoons, but Montana does not. Do you think Montana should or should not require a license for hunting such small animals?

1. SHOULD LICENSE	2. SHOULD NOT LICENSE

3. OTHER *(Specify)* _____

E9. At the present time, nongame wildlife receive little direct funding or emphasis in state programs, but some benefits come indirectly through other wildlife programs. How do you feel about this -- do you think nongame wildlife should receive more direct funding and emphasis, are you generally satisfied with the way things are now, or what?

1. MORE DIRECT FUNDING AND EMPHASIS	2. SATISFIED WITH WAY THINGS ARE NOW

GO TO E10 ON PAGE 20

3. OTHER *(Specify)* _____

_____

GO TO E10 ON PAGE 20

E9a. How would you feel about a procedure where people could donate part of their state income tax refund to this by checking a box on their tax form -- would you favor this kind of refund checkoff procedure, would you oppose it, or what?

1. FAVOR PROCEDURE	2. OPPOSE PROCEDURE

3. OTHER *(Specify)* _____

E10. Most of the funds used for wildlife programs in general are paid by people who hunt and fish. Do you think the state should or should not also use these funds for nongame wildlife?

1. SHOULD USE FOR NONGAME	2. SHOULD NOT USE FOR NONGAME

3. OTHER *(Specify)* _____

E11. Montana law protects certain endangered animals, such as the bald eagle and the whooping crane. Do you think the cost of protecting these animals should be financed by hunting and fishing license fees, or should it be financed some other way?

1. USE HUNTING AND FISHING LICENSE FEES

OTHER (X What would you suggest?) _____

_____

E12. What are your feelings about private game farms where game is grown for meat or other products, or where people pay to hunt the privately owned wildlife? Generally speaking, would you say you favor this kind of operation, are opposed to it, or what?

1. FAVOR GAME FARMS	2. OPPOSED

3. OTHER *(Specify)* _____

E13. Do you think the state should or should not regulate private game farms such as these?

1. SHOULD REGULATE	2. SHOULD NOT REGULATE	3. OTHER *(Specify)* _____
GO TO F1 ON PAGE 22	↓	↓

E13a. Why do you feel that way? _____

_____

_____

F1. In Montana, fish and wildlife and various recreation opportunities are found on both public and private lands. As a result, access to and through private lands can be important for fishing, hunting, and other recreation. Do you think there is any friction or problem between private landowners and people who use their lands for these kinds of activities?

1. YES

2. NO

GO TO F2

F1a. Is this problem very serious, serious, or not too serious at all?

1. VERY SERIOUS

2. SERIOUS

3. NOT TOO SERIOUS

F2. Have you ever experienced a problem or friction with a private landowner about access to hunting, fishing, or recreation sites?

1. YES

2. NO

GO TO F3
ON PAGE 23

F2a. Does this happen very often, sometimes, or not too frequently?

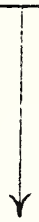
1. VERY OFTEN

2. SOMETIMES

3. NOT TOO FREQUENTLY

F3. Do you have any land that either <u>is</u> used or <u>could be</u> used for hunting, fishing, or other recreation?

1. YES	2. NO
	GO TO F5



F4. Have you ever encountered any friction or problem with other people regarding access to or through your land for any of these activities?

1. YES	2. NO
	GO TO F5

F4a. Does this happen very often, sometimes, or not too frequently?

1. VERY OFTEN	2. SOMETIMES	3. NOT TOO FREQUENTLY

F5. Rather than actually purchasing additional land, the state could negotiate long-term easements across private lands in order to reach public lands for hunting, fishing, and so on. How do you feel about this -- do you favor the state negotiating such easements, are you opposed, or what?

1. FAVOR EASEMENTS	2. OPPOSE EASEMENTS	3. OTHER *(Specify)* _____ _____

F6. The state does have various other land programs underway to obtain land for fish, wildlife, and recreation. Now, if the state did negotiate the easements mentioned earlier, do you feel such a program should be taken on in addition to or instead of some of the other land programs?

1. IN ADDITION

2. INSTEAD
GO TO F7

3. OTHER *(Specify)* _____
_____
GO TO F7

F6a. How should such a program be funded -- through increased hunting and fishing fees paid by the actual users, or some other way?

1. INCREASED HUNTING AND FISHING FEES

OTHER (Ⓧ What would you suggest?)
_____
_____

F7. How would you feel about giving private landowners some kind of financial incentive for maintaining wildlife habitat and allowing access -- would you approve or disapprove of this?

1. APPROVE

2. DISAPPROVE
GO TO F8 ON PAGE 25

F7a. How should this be funded -- through increased hunting and fishing license fees, or something else?

1. INCREASED HUNTING AND FISHING LICENSE FEES

OTHER (Ⓧ What would you suggest?) _____
_____
_____

F8. Montana's water is important not only for maintaining the state's fish and wildlife, but also for agricultural and industrial purposes. Some people feel that the amounts of water needed to support fish and wildlife should be maintained before any other uses are considered. There are also some who feel the water should be maintained for fish and wildlife and for agriculture before anything else. And there are also others who feel the water should be equally available for all uses including industrial purposes. How do you feel about this?

1. MAINTAIN FOR FISH AND WILDLIFE BEFORE ANYTHING ELSE IS CONSIDERED

2. MAINTAIN FOR FISH-WILDLIFE AND AGRICULTURE BEFORE ANYTHING ELSE

3. EQUALLY AVAILABLE FOR ALL USES, INCLUDING INDUSTRIAL

4. OTHER *(Specify)* _____

_____

F9. Oil and gas exploration, coal mining, and other energy-related activities are occurring more often in Montana. In some areas, they could affect fish and wildlife habitat. In order to assure consideration of fish and wildlife habitat, do you think the Montana Department of Fish, Wildlife, and Parks should have a say in the state's decisions relating to these activities, or would you prefer that the Department not be involved?

1. SHOULD HAVE A SAY

GO TO F10 ON PAGE 26

2. SHOULD NOT BE INVOLVED

F9a. Why do you say that? _____

_____

_____

_____

3. OTHER *(Specify)* _____

_____

GO TO F10 ON PAGE 26

F10. The Department of Fish, Wildlife, and Parks is responsible for enforcing the state's fish, game, and park regulations. What are your feelings about all the Department's various enforcement activities taken as a whole -- generally speaking, would you say the Department provides adequate enforcement, does it do more than is really called for, or would you favor an increase in enforcement efforts by the Department?

1. INCREASE ENFORCEMENT	2. ADEQUATE NOW	3. DOES MORE THAN IS CALLED FOR

F11. Now, thinking only about the number of people who actually enforce the regulations in the field -- do you think the Department has enough of these people in the field, or would you say more enforcement personnel are needed?

1. ENOUGH NOW	3. OTHER *(Specify)* _____
2. MORE ARE NEEDED	_____
	_____

F12. If the overall enforcement program is expanded in any way, would you favor or oppose an increase in license fees to cover any additional costs?

1. FAVOR FEE INCREASE	2. OPPOSE FEE INCREASE

F13. Suppose the Department was planning to change or expand its enforcement effort. And, rather than hiring more enforcement personnel, suppose it was considering the following approaches:

1. more public information about the regulations in general; or

2. emphasizing the penalties for breaking the regulations; or

3. encouraging the public to report any violations they see.

If you had to choose, which one of these approaches would you prefer?
(Circle the number of the response above or record in OTHER, as appropriate.)

OTHER *(Specify)* _____

_____

_____

F14. Recently, the Department's field personnel, other than game wardens, were trained and given authority to enforce the state's fish, game, and park regulations. These people are referred to as ex-officio enforcement officers. Generally speaking, would you say you favor or oppose this practice?

1. FAVOR

2. OPPOSE

GO TO F15 ON PAGE 28

F14a. What about expanding this to give enforcement authority to other people, such as field personnel in other state or federal agencies -- in general, would you be in favor of that or would you be opposed?

1. FAVOR

2. OPPOSE

F15. What are your feelings about a toll-free telephone number for reporting fish and game violations and landowner problems such as trespass and property damage -- generally speaking, do you like that idea or not?

1. LIKE IDEA	2. DO NOT LIKE IDEA

F16. As far as you know, does the state have such a toll-free telephone number now?

1. YES	2. NO	3. DON'T KNOW

GO TO F17

F16a. Have you ever used the toll-free number to report a violation or related problem?

1. YES	2. NO

F17. Do you know who the game warden is in your area?

1. YES	2. NO; DON'T KNOW

F18. Do you know how to get in touch with the game warden in your area if it's necessary?

1. YES	2. NO; DON'T KNOW

F19. Some people feel that students in Montana's public elementary schools should be required to have a course in conservation education that would cover fish, wildlife, and plants and their relationships to their environments. Generally speaking, would you favor or oppose such a requirement?

1. FAVOR	2. OPPOSE

F20. Did you purchase a Montana conservation license for 1979?

1. YES	2. NO	3. DON'T KNOW

F21. Did you purchase any hunting licenses or tags for 1979?

1. YES	2. NO

F22. What about a fishing license -- did you purchase one for 1979?

1. YES	2. NO

F23. Overall, how would you rate the performance of the Montana Department of Fish, Wildlife, and Parks -- would you say it's excellent, good, only fair, or poor?

1. EXCELLENT	2. GOOD	3. ONLY FAIR	4. POOR

F24. Have you ever seen the magazine Montana Outdoors?

1. YES | 2. NO | 3. DON'T KNOW

→ *GO TO F25* ←

F24a. Do you currently subscribe to it?

1. YES
GO TO F25

2. NO

F24b. Is there any particular reason why? _____

_____

_____

F25. Now I'm going to read a list of descriptions -- as I read each one, please tell me if you feel it applies to you.

(Begin with item marked and continue through the list, ending with the item, if any, just above the one marked. Read only the items, not the preceding letters.)

[ ] A. Hunter

[ ] B. Antihunter

[ ] C. Fisherman

[ ] D. Rancher or farmer

[ ] E. Environmentalist

[ ] F. City dweller

[ ] G. Photographer

[ ] H. Backpacker

[ ] I. Gun collector

[ ] J. Montana history "buff"

To finish up, we need some information about you and your household for classification purposes.

G1. What is the highest grade of school, or year of college, you completed?

GRADES OF SCHOOL												
00	01	02	03	04	05	06	07	08	09	10	11	12

COLLEGE				
1	2	3	4	5+

G1a. Did you get a high school diploma or pass a high school equivalency test?

1. YES 2. NO

G1b. Do you have a college degree?

1. YES 2. NO

GO TO G1d BELOW

G1c. What degree is that? *(Specify associate, bachelor's, master's, etc.)*

_____

G1d. Have you had any other schooling? *(Include vocational school, beauty college, on-the-job training, etc.)*

1. YES 2. NO → *GO TO G2 ON P. 32*

G1e. What kind? _____

_____

G2. Now we'd like to ask about your work status. Are you working for pay, either full time or part time?

1. YES (OR HAS JOB BUT NOT WORKING JUST NOW -- ON VACATION, SICK)

2. ON STRIKE; TEMPORARILY LAID OFF BUT EXPECT TO BE RECALLED

GO TO G3 ON PAGE 33

NO

G2a. Are you unemployed, retired, (a homemaker), a student, or what? (*If R says more than one:* ⓧ What do you consider yourself to be primarily?)

3. UNEMPLOYED

4. RETIRED

5. HOMEMAKER

GO TO G4 ON PAGE 34

STUDENT →

G2b. Are you a full-time or part-time student?

6. FULL-TIME

7. PART-TIME

GO TO G4 ON PAGE 34

8. OTHER *(specify)*: _____

_____

_____

_____

GO TO G4 ON PAGE 34

G3. About how many hours do you usually work on your job in an average week?

ONE JOB ONLY: Record in box (A) below; leave box (B) blank

MORE THAN ONE JOB: Ask about main job first, then about total for all jobs.

(A) How many hours a week do you usually work on your main job?

(B) About how many hours a week altogether do you usually work on all your jobs?

	(A) ONE JOB/MAIN JOB	(B) ALL JOBS TOTAL
HOURS PER WEEK:		

G3a. What is your main occupation? (What sort of work do you do in your job?) *(If more than one job, ask only about main job -- one R spends most time on, one R gets the most income from.)*

_____

_____

_____

G3b. Tell me a little more about what you do in that job.

_____

_____

_____

G3c. What kind of business or industry is it in? (X What's the name of the firm?)

_____

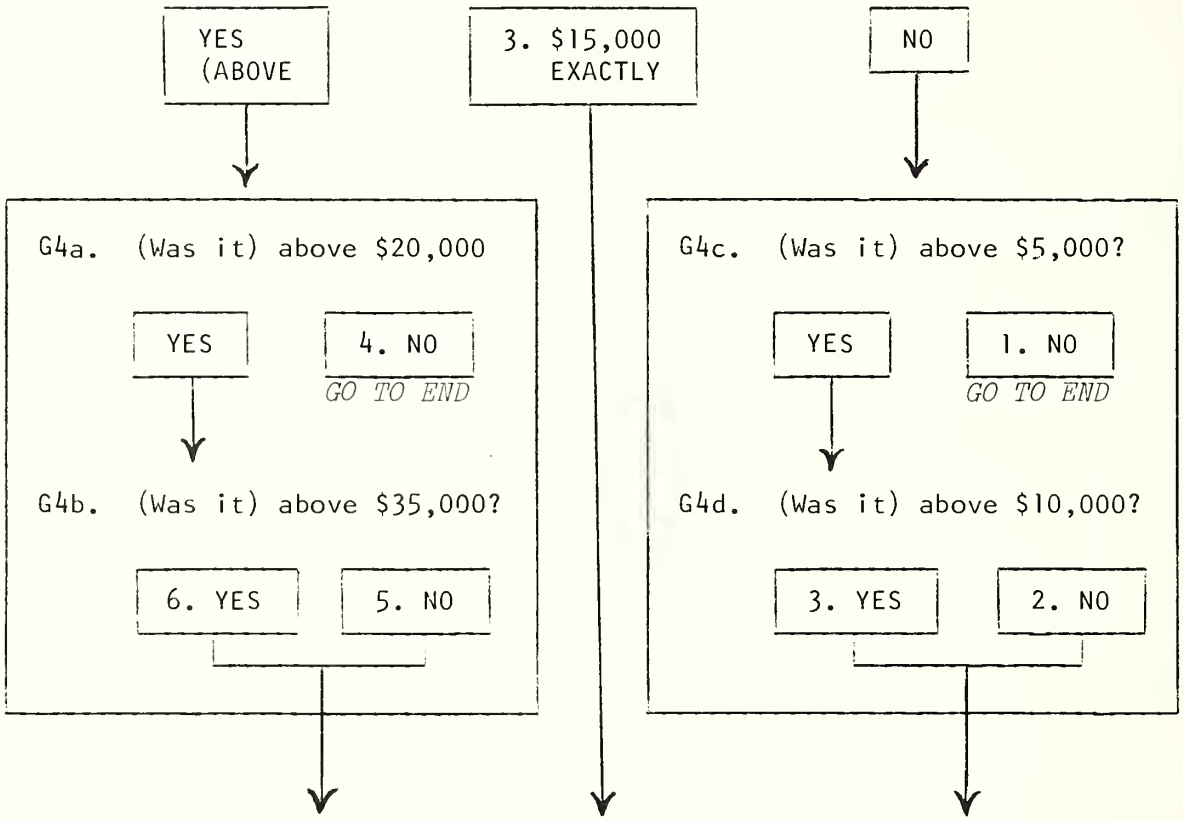
_____

G3d. Are you employed by someone else in that job, are you self-employed, or what?

SOMEONE ELSE	SELF-EMPLOYED

G4. Last of all, to get an accurate picture of people's financial situations, we need to know the income of all the households we interview -- this would be all the income you (and your family or household) received in 1979, from all sources, and before taxes and other deductions.

Was your total (family or household) income in 1979 above $15,000?



Those are all the questions I have. Thank you very much for taking the time to participate in the survey -- we appreciate your willingness to help.

EXACT TIME NOW:

3

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